New York State Education Department

New York State Museum

63d ANNUAL REPORT

1909

In 4 volumes

VOLUME 3

APPENDIX 5

TRANSMITTED TO THE LEGISLATURE FEBRUARY 21, 1910

SMITHSONIAN INSTITUTION
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NATIONAL MUSEUM

ALBANY
UNIVERSITY OF THE STATE OF NEW YORK
1911

STATE OF NEW YORK

EDUCATION DEPARTMENT

Regents of the University

With years when terms expire

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1917 ST CLAIR MCKELWAY M.A. LL.D. *Vice Chancellor* - - - - Brooklyn
1919 DANIEL BEACH Ph.D. LL.D. - - - - - - - - - - - Watkins
1914 PLINY T. SEXTON LL.B. LL.D. - - - - - - - - - - Palmyra
1912 T. GUILFORD SMITH M.A. C.E. LL.D. - - - - - - - Buffalo
1918 WILLIAM NOTTINGHAM M.A. Ph.D. LL.D. - - - - - - Syracuse
1922 CHESTER S. LORD M.A. LL.D. - - - - - - - - - - New York
1915 ALBERT VANDER VEER M.D. M.A. Ph.D. LL.D. - - - - Albany
1911 EDWARD LAUTERBACH M.A. LL.D. - - - - - - - - - New York
1920 EUGENE A. PHILBIN LL.B. LL.D. - - - - - - - - - New York
1916 LUCIAN L. SHEDDEN LL.B. LL.D. - - - - - - - - - Plattsburg
1921 FRANCIS M. CARPENTER - - - - - - - - - - - - Mount Kisco

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STATE OF NEW YORK

No. 45

IN ASSEMBLY

FEBRUARY 21, 1910

63d ANNUAL REPORT

OF THE

NEW YORK STATE MUSEUM

VOLUME 3

To the Legislature of the State of New York

We have the honor to submit herewith, pursuant to law, as the 63d Annual Report of the New York State Museum, the report of the Director, including the reports of the State Geologist and State Paleontologist, and the reports of the State Entomologist and the State Botanist, with appendixes.

ST CLAIR MCKELWAY
Vice Chancellor of the University
ANDREW S. DRAPER
Commissioner of Education

Appendix 5

Museum Memoir 12

Birds of New York, part 1

New York State Education Department

New York State Museum

John M. Clarke, Director

Memoir 12

BIRDS OF NEW YORK

BY

ELON HOWARD EATON

Part 1

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ALBANY
UNIVERSITY OF THE STATE OF NEW YORK
1910

STATE OF NEW YORK

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With years when terms expire

1913	Whitelaw Reid M.A. LL.D. D.C.L. *Chancellor*	New York
1917	St Clair McKelway M.A. LL.D. *Vice Chancellor*	Brooklyn
1919	Daniel Beach Ph.D. LL.D.	Watkins
1914	Pliny T. Sexton LL.B. LL.D.	Palmyra
1912	T. Guilford Smith M.A. C.E. LL.D.	Buffalo
1918	William Nottingham M.A. Ph.D. LL.D.	Syracuse
1910	Chester S. Lord M.A. LL.D.	New York
1915	Albert Vander Veer M.D. M.A. Ph.D. LL.D.	Albany
1911	Edward Lauterbach M.A. LL.D.	New York
1920	Eugene A. Philbin LL.B. LL.D.	New York
1916	Lucian L. Shedden LL.B. LL.D.	Plattsburg
1921	Francis M. Carpenter	Mount Kisco

Commissioner of Education

Andrew S. Draper LL.B. LL.D.

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Statistics, Hiram C. Case
Trades Schools, Arthur D. Dean B.S.
Visual Instruction, Alfred W. Abrams Ph.B.

New York State Education Department
Science Division, April 1, 1908

Hon. Andrew S. Draper LL.D.
Commissioner of Education

SIR: In 1844 this State published as one of the volumes of the *Natural History of New York* a comprehensive and finely illustrated treatise on the birds of the State prepared by the eminent ornithologist, James E. DeKay. Ever since its date of issue this work has been of fundamental value to all students of birds and may justly be regarded as, in a large degree, the primary inspiration of the present widespread interest among the people of the State in the science of ornithology.

In 1904, 60 years from its publication, I urgently represented to you that a restudy of this field was desirable in order to bring together the increments to knowledge during the long period which had elapsed without active interest therein on the part of the State, and to meet the very general and lively concern in the subject among our citizens.

Consequent upon your cordial approbation of this plan, Mr E. Howard Eaton, an experienced student of the birds, was asked to undertake the preparation of a work which would meet the present needs of the public.

It is with much satisfaction that I now have the honor to transmit to you herewith for publication as a memoir of the State Museum, the manuscript of the first volume of this treatise, accompanied by the plates in color which have been prepared by the accomplished bird artist, Mr Louis Agassiz Fuertes.

Very respectfully
JOHN M. CLARKE
Director

State of New York
Education Department
COMMISSIONER'S ROOM

April 8, 1908

The economic value of birds, the aid which they bring to common culture, and the stimulus which they give to moral sense, constitute ample warrant for supplying accurate and scientific information about birds and bird life, at the expense of the State. Our State has already done something to this end, and what it did was well done, for it devoted one of the sumptuous volumes of the Natural History of New York to the subject. But that was before most people now living were born. It is said, no doubt with truth, that that work has been the main reliance of serious students of ornithology and the main inspiration of substantial popular interest in birds, not only in New York but beyond our borders, for more than sixty years. Certainly, popular interest in the subject has both widened and deepened. The present needs were brought officially to my attention by Dr John M. Clarke, the Director of the Science Division of this Department, very soon after the organization of the present Department, and he was authorized to go forward with the preparation of a work that would meet these needs, with the assurance that it would be published by the State if it proved to be widely comprehensive of the subject, was given a form which would appeal to popular interest, and was marked by scientific accuracy for which he would vouch. Even so much as this appears to have been realized, and publication is approved.

Commissioner of Education

New York State Education Department

New York State Museum

John M. Clarke, Director

Memoir 12

BIRDS OF NEW YORK

BY

ELON HOWARD EATON

PART I

PREFACE

During the past half century there has been a remarkable advance in all departments of ornithology. Detailed study of the structure, classification, migration and distribution of birds has virtually revolutionized the science. The popular awakening of interest in nature study and the increased appreciation of the out-of-doors among all classes of society, has largely centered in bird study as one of the most delightful and fascinating recreations. The vast army of American sportsmen is becoming aroused to the necessity of protecting our game and wild birds more efficiently, lest they all go the way of the Heath hen and Wild pigeon. The Audubon societies are making an heroic defense of our song birds and vanishing sea fowl. National and state governments and individual biological researches have proved the inestimable value of birds to agriculture. Many American states have established special commissions for the study of economic ornithology and have published extensive reports on native birds and their value to the commonwealth.

On account of the rapidly changing natural conditions in this country due to settlement and cultivation, and because of the wanton and thoughtless destruction of forests and wild life which has characterized the last century, there is most urgent need of public sentiment asserting itself in the protection and encouragement of our wild birds, if this State is to preserve the remnant of its heritage of game birds whose abundance astounded the early explorers, and if we are to keep the song birds which lend such a charm to country life and insure the farmer against the outbreak of insect pests which constitute the most serious menace to the agricultural wealth of the State.

During the 64 years which have elapsed since DeKay's account of New York ornithology was published, 100 species of birds have been added to our State list and material advancement has been made in our knowledge of the habits and distribution of the commoner species. The present report has been prepared with the double purpose of bringing together as completely as possible our knowledge of New York birds at the present time; by affording the intelligent public an account of every species known to occur within the State, accompanied with the illustrations so successfully executed by Mr Fuertes, it is hoped that the rising generation will become sufficiently acquainted with the beauty, interest and value of our birds to appreciate and protect them more efficiently.

For assistance in preparing this report the author is indebted to all students of New York birds who are mentioned in the introduction to the summary of the published and county lists; to Dr Clarke, Director of the State Museum, at whose suggestion the work was begun, and to his corps of assistants who have helped in the study of the State's specimens and records; to the authorities of the United States National Museum in Washington, especially Professor Ridgway, Dr Richmond and Mr Riley who have furnished free access to the specimens in the Smithsonian collections of birds and eggs; to the authorities of the Biological Survey, United States Department of Agriculture, who have placed their extensive collection of records and specimens at his disposal, especially to Dr Merriam,

Chief of the Survey, and to Dr Fisher, Professor Cooke, Mr Oberholser and Mr Howell, all of whom have worked in New York territory and have rendered generous assistance; to the officers of the American Museum of Natural History in New York city, specially to Dr Allen, Mr Chapman and Mr Miller, for the use of their records and specimens; to Dr Jonathan Dwight for comparison of specimens with his complete series of subspecies of eastern birds; and to Mr Dutcher for the use of his Long Island collection and exhaustive notes on Long Island birds.

ELON HOWARD EATON

Canandaigua, N. Y., March 25, 1908

ILLUSTRATOR'S NOTE

In illustrating a work of the importance and scope of the present one it has been necessary to draw upon larger material than was available in my own cabinets, so recourse was had to the more complete collections of others. The majority of the land birds and smaller water birds have been drawn from specimens of my own collecting, while most of the larger species were kindly loaned by different institutions; the New York State Museum at Albany, the American Museum of Natural History in New York, and the Department of Zoology of Cornell University.

The living appearance of a bird is seldom well expressed by a dried skin, however perfect it may be, and in many instances a specimen gives no hint of the grace and beauty furnished in life by the bright colors of the perishable parts: the eyes, the soft skin of bill and feet of many water birds, and, in rare cases, the living feathers themselves. For there are some birds, notably the group of Black-headed gulls, some terns, and the larger mergansers, whose white plumage is suffused at certain seasons with a most beautiful tinge of shell-pink or rosy cream-color which is evanescent, and soon fades from the most carefully prepared and cherished skin. The rich colors often found in the bill, legs and feet also change with the process of drying, and it is a cause of surprise and regret to students to find how meager is the literature bearing upon this important item of bird coloration. It is almost impossible to find concise descriptions of even the more striking of these transitory beauties, while those less brilliant but not less beautiful and interesting are generally allowed to pass entirely undescribed. Thus it early became apparent to me that if such data were to be recorded it must be done from actual specimens, painted, in short, from living or fresh taken birds, before the settling of the body fluids or the disintegration or absorption of pigments could take place. This, it may be said, is frequently a matter of only an instant, and in most cases, also, the high color is only attained in adult birds and at the approach of the breeding season.

Thus it has come to be the most important part of my field work for the past 10 years to make careful color notes of all these changeable parts, at the first possible moment after the capture of the bird, and I have endeavored to miss no opportunity to add to my collection. As a result I now have a large series of such studies, fairly covering the field, which has been freely drawn upon in this work, and without which many of the subjects could not possibly have been rendered even slight justice. And it is still possible that some of the species are incorrectly represented, owing to the impossibility of getting fresh specimens or adequate descriptions of the rarer ones. In these few cases reference has been made to such descriptions as were available and to the original edition of Audubon—an expedient not without precedent among authors of the present day.

Owing to the large number of species and plumages necessary to present, it was found impossible to devote an entire plate to each species as was the first hope of all connected with the work. This accounts for the regrettable combining of several species on a plate, at times introducing anomalous conditions, and bringing birds together that seldom see each other. We have tried hard to reduce such cases to a minimum, and it should be understood that where these occur there was no better solution apparent. Among the water birds, presented in volume 1, the groups are for the most part not unnatural, though frequently crowded, but among the land birds in the second volume it was necessary to frankly face the situation, do the best we could, and make this explanation.

Louis Agassiz Fuertes

Ithaca, N. Y.

SUMMARY OF THE NEW YORK STATE AVIFAUNA

At the present time there are 411 species of birds which have been recorded as occurring in New York State. Sixty-four years ago, when DeKay's *Ornithology of New York* appeared, 301 species were known. By referring to the tables of local lists, it will be seen that several species well known at the present time were unknown to Dr DeKay: such as the Alder fly-catcher, Prairie horned lark, Rough-winged swallow, Migrant shrike, Louisiana water-thrush, Connecticut warbler, Hudsonian chickadee and Gray-cheeked thrush. But the greater portion of the 100 species which have been added to the State list are uncommon or accidental visitants to this region.

It is impossible to group New York birds according to their mode of occurrence into sharply defined classes, but the following summary may be useful. For a full account of the distribution of each species, however, the reader is referred to the schedules in the local lists, and to the specific descriptions.

I Residents

These are species which are found within the State at all seasons of the year and breed within its borders.

A Species occurring throughout the year in all, or the greater portion of the State. Some of these, like the Red-headed woodpecker, are occasionally migratory, and others, like the Crow, are rarely found in the highlands or colder districts during midwinter.

Ruffed grouse
Bald eagle
American long-eared owl
Short-eared owl
Barred owl
Screech owl
Great horned owl
Hairy woodpecker
Downy woodpecker
Red-headed woodpecker
Blue jay
American crow
House sparrow
American goldfinch
Cedar waxwing
White-breasted nuthatch
Chickadee

B Species that breed throughout the greater portion of the State and occur sparingly during winter in the warmer districts. They are all, however, more common as summer residents. To these some might prefer to add the summer residents mentioned on page 13 which are marked *wr*.

Marsh hawk
Sharp-shinned hawk
Cooper hawk
Red-tailed hawk
Red-shouldered hawk
American sparrow hawk
Belted kingfisher
Northern flicker
Prairie horned lark
Cowbird
Meadowlark
Purple finch
Song sparrow
Swamp sparrow
Robin
Bluebird

C Species which breed more or less commonly in the colder districts and winter in the warmer districts, occurring chiefly as migrants in the greater portion of the State. Those marked *wr* are most typically winter residents.

Loon
Herring gull *wr*
American merganser *wr*
Red-breasted merganser
Black duck
American golden-eye *wr*
American goshawk
Saw-whet owl
Yellow-bellied sapsucker
American crossbill *wr*
White-winged crossbill *wr*
Pine siskin
White-throated sparrow
Junco
Myrtle warbler
Winter wren
Brown creeper
Red-bellied nuthatch
Golden-crowned kinglet
Hermit thrush

D Species occurring only in the warmer portions of the State.

American barn owl
Bobwhite
Red-bellied woodpecker
Fish crow
Cardinal
Mockingbird
Carolina wren
Tufted titmouse

INTRODUCED SPECIES

English pheasant
Ring-necked pheasant
Skylark
Starling
European goldfinch

EXTIRPATED SPECIES

Heath hen
Wild turkey
Carolina paroquet

E Residents of the colder districts, mostly in the Adirondack region.

Canada grouse
Canadian ruffed grouse
Arctic three-toed woodpecker
American three-toed woodpecker
Northern pileated woodpecker
Canada jay
Northern raven
Hudsonian chickadee

II Summer residents

These are species which are found in the State during the summer and breed more or less commonly within its borders. Those marked *wr* are occasionally found during winter in the southern districts but from the evidence at hand we find them to belong more characteristically to this group than to that of permanent residents. Those marked with a (?) are not known to breed regularly at the present time.

A Species which breed throughout the greater portion of the State:

Pied-billed grebe *wr*
Hooded merganser *wr*
Wood duck
American bittern *wr*
Least bittern
Great blue heron *wr*
Green heron
Black-crowned night heron *wr*
Virginia rail *wr*
Sora *wr*
American woodcock *wr*
Bartramian sandpiper
Spotted sandpiper
Killdeer *wr*
Passenger pigeon ?
Mourning dove *wr*
Broad-winged hawk *wr*
Duck hawk *wr*
American osprey
Yellow-billed cuckoo
Black-billed cuckoo
Whip-poor-will
Night hawk
Chimney swift
Ruby-throated hummingbird
Kingbird
Crested flycatcher
Phoebe
Wood pewee
Least flycatcher
Bobolink
Red-winged blackbird *wr*
Baltimore oriole
Bronzed grackle *wr*
Vesper sparrow *wr*
Savanna sparrow *wr*
Chipping sparrow
Field sparrow *wr*
Towhee *wr*
Rose-breasted grosbeak
Indigo bird
Scarlet tanager
Purple martin
Cliff swallow
Barn swallow
Tree swallow
Bank swallow
Migrant shrike *wr*

Red-eyed vireo
Warbling vireo
Yellow-throated vireo
Black and white warbler
Northern parula warbler
Yellow warbler
Chestnut-sided warbler
Black-throated green warbler
Pine warbler *wr*
Ovenbird
Northern yellowthroat
American redstart
Catbird *wr*
Brown thrasher *wr*
House wren
Long-billed marsh wren *wr*
Wood thrush
Wilson thrush

B Species breeding in the warmer districts. Most of these belong to the Carolinian fauna, but some like the Common tern, though not properly belonging to that fauna, in this State breed only in the southern portions.

Laughing gull ?
Common tern
Roseate tern
Least tern ?
Snowy heron ?
Clapper rail *wr*
King rail *wr*
Florida gallinule
Piping plover
Green-crested flycatcher
Orchard oriole
Purple grackle *wr*
Grasshopper sparrow
Henslow sparrow
Sharp-tailed sparrow *wr*
Seaside sparrow *wr*
Dickcissel ?
Rough-winged swallow
White-eyed vireo
Worm-eating warbler
Blue-winged warbler
Golden-winged warbler
Lawrence warbler ?
Brewster warbler ?
Southern parula warbler
Cerulean warbler
Prairie warbler
Louisiana water-thrush
Kentucky warbler
Yellow-breasted chat
Hooded warbler
Short-billed marsh wren
Blue-gray gnatcatcher ?

C Species breeding mainly in the colder districts, and belonging mostly to the Canadian fauna.

Black tern
Blue-winged teal
American coot
Wilson snipe *wr*
Solitary sandpiper ?
Pigeon hawk *wr*
Olive-sided flycatcher
Yellow-bellied flycatcher
Alder flycatcher
Rusty blackbird *wr*
Lincoln sparrow
Carolina junco ?
Blue-headed vireo
Nashville warbler

Tennessee warbler
Black-throated blue warbler
Magnolia warbler
Blackpoll warbler
Blackburnian warbler
Northern water-thrush
Mourning warbler
Canadian warbler
Bicknell thrush
Olive-backed thrush

III Transients

These are species which pass through the State while migrating to and from their breeding grounds, which lie to the north or northwest of this State. Some of these, like the Long-tailed jaeger, Arctic tern, and Blue goose seem to be rare migrants with us, but appear to belong to this category more than that of accidental visitants. Species marked *wr* are sometimes found throughout the winter in the warmer portions of the State, those marked *b* have been known to breed in the State.

Pomarine jaeger
Parasitic jaeger
Long-tailed jaeger
Sabine gull
Caspian tern
Forster tern
Arctic tern
Leach petrel
Cormorant *wr*
Double-crested cormorant *wr*
White pelican
Mallard *b*, *wr*
Gadwall
Baldpate
Green-winged teal *b*, *wr*
Shoveler *b*
Pintail *wr*
Ring-necked duck
Ruddy duck *b*, *wr*
Greater snow goose
Blue goose
White-fronted goose
Hutchins goose
Whistling swan
Yellow rail *wr*
Red phalarope
Northern phalarope
Wilson phalarope
Dowitcher
Long-billed dowitcher
Stilt sandpiper
Knot
Pectoral sandpiper
White-rumped sandpiper
Baird sandpiper
Least sandpiper
Red-backed sandpiper
Semipalmated sandpiper
Western sandpiper
Sanderling *wr*
Marbled godwit
Hudsonian godwit
Greater yellow-legs *wr*
Yellow-legs
Willet
Buff-breasted sandpiper
Long-billed curlew
Hudsonian curlew
Eskimo curlew
Black-bellied plover

American golden plover
Semipalmated plover
Turnstone
Golden eagle *b, wr*
Nelson sparrow
Acadian sharp-tailed sparrow
White-crowned sparrow
Fox sparrow *wr*
Philadelphia vireo
Orange-crowned warbler
Cape May warbler
Bay-breasted warbler
Palm warbler
Yellow palm warbler
Connecticut warbler
Wilson warbler
American pipit *wr*
Ruby-crowned kinglet
Gray-cheeked thrush

IV Winter visitants

A Species found in this State in the winter and retiring to higher latitudes in summer to breed.

Red-throated loon
Puffin
Brünnich murre
Razor-billed auk
Dovekie
Kittiwake
Glaucous gull
Iceland gull
Kumlien gull
Great black-backed gull
Canvasback
Barrow golden-eye
Old-squaw
Harlequin duck
Labrador duck (*extinct*)
American eider
King eider
Purple sandpiper
American rough-legged hawk
Gyrfalcon
Black gyrfalcon
Great gray owl
Richardson owl
Snowy owl
American hawk owl
Horned lark
Evening grosbeak
Pine grosbeak
Redpoll
Holboell redpoll
Greater redpoll
Snowflake
Lapland longspur
Ipswich sparrow
Tree sparrow
Bohemian waxwing
Northern shrike

B Species occurring in the warmer districts, or on the seacoast during winter, but more common as migrants both on the coast and in the interior.

Holboell grebe
Horned grebe *b*
Ring-billed gull
Bonaparte gull
Gannet
Red-head

Greater scaup
Lesser scaup
Buffle-head
American scoter
White-winged scoter
Surf scoter
Canada goose
White-bellied brant

V Summer visitants

These are species which occur during summer but breed in more southern latitudes, and wander northward after their nesting season is over, or like the Summer tanager, overreach their normal range during migration, but are not known to breed within our boundaries.

Cory shearwater
Greater shearwater
Sooty shearwater
Gull-billed tern
Sooty tern
Black skimmer
Wilson petrel
Glossy ibis
American egret
Little blue heron
Yellow-crowned night heron
Black rail ? (*summer resident*)
Wilson plover
American oyster catcher
Turkey vulture
Swallow-tailed kite
Summer tanager

VI Accidental visitants

These are species whose breeding range, or usual migration route, is far from our borders and which occur in our State very rarely or accidentally.

A Southern species: summer visitants which have occurred only one, two, or three times.

Royal tern
Cabot tern
Trudeau tern
Audubon shearwater
Black-capped petrel
Scaled petrel
Yellow-billed tropic bird
Booby
Brown pelican
Man-o'-war bird
White ibis
White-faced glossy ibis
Wood ibis
Louisiana heron
Purple gallinule
Ground dove
Black vulture
Gray kingbird
Blue grosbeak
Painted bunting
Prothonotary warbler
Yellow-throated warbler
Brown-headed nuthatch
Carolina chickadee ?

B Western species which live mostly beyond the Mississippi river and casually wander to New York during their migrations.

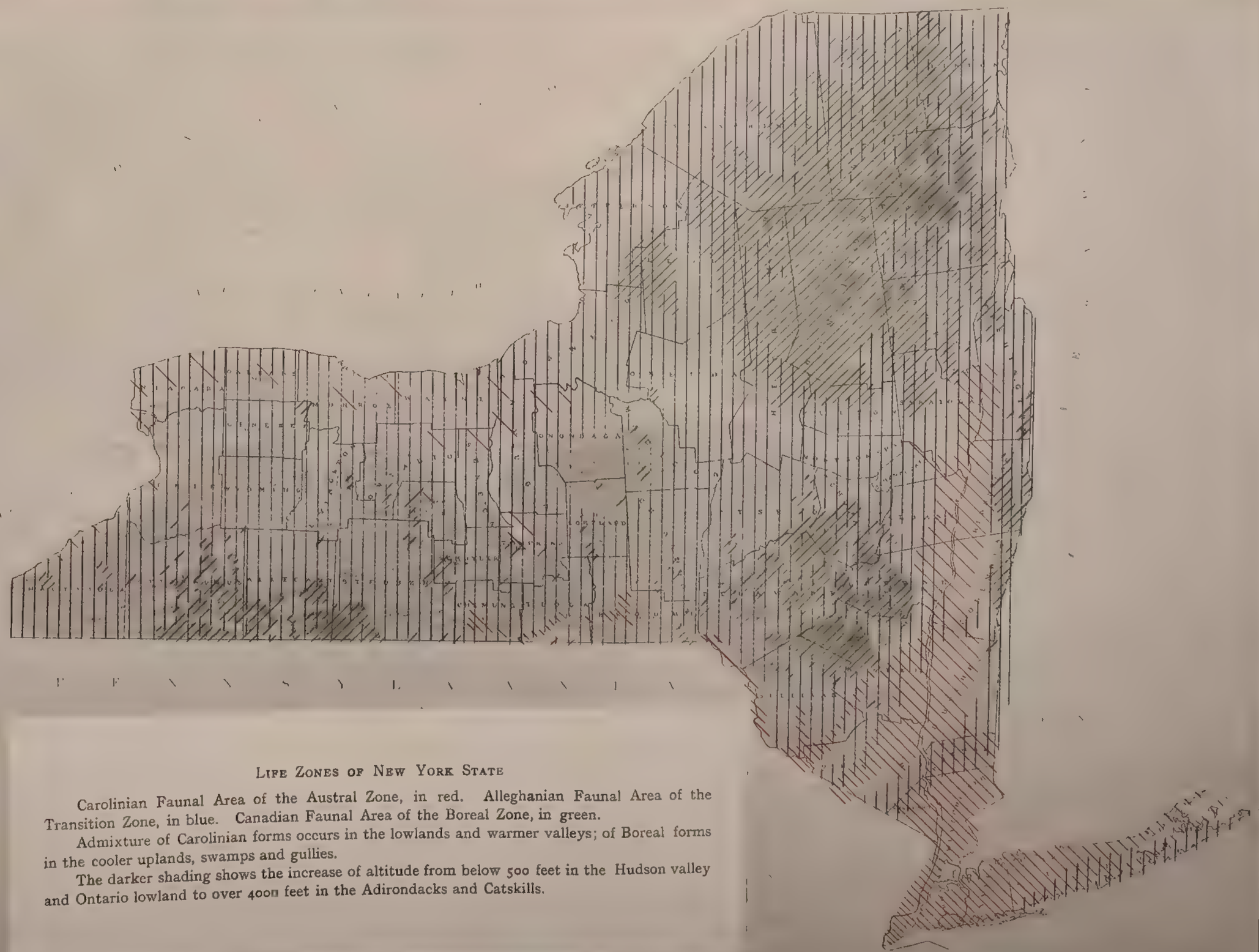
Cinnamon teal
Lesser snow goose
Black brant
Trumpeter swan ?
Whooping crane (*formerly*)
Sandhill crane
American avocet
Black-necked stilt
Swainson hawk
Burrowing owl
Arkansas kingbird
Hoyt horned lark
Yellow-headed blackbird
Bullock oriole
Chestnut-collared longspur
Baird sparrow
Leconte sparrow
Lark sparrow
Gambel sparrow
Lark bunting
Louisiana tanager
Plumbeous vireo
Grinnell water-thrush
Townsend solitaire
Varied thrush

C Northern species which have reached our territory on only one or two occasions but might be regarded as rare winter visitants.

Black-throated loon
Black guillemot
Skua
Ivory gull
Willow ptarmigan
White gyrfalcon ?
Hoary redpoll ?

D European species

Little gull
Manx shearwater ?
Stormy petrel ?
Widgeon
European teal
Rufous-crested duck
Barnacle goose
Corn crake
Dunlin
Curlew sandpiper
Ruff
European curlew
Lapwing
European linnet?
Green finch?
Wheatear



LIFE ZONES OF NEW YORK STATE

Carolinian Faunal Area of the Austral Zone, in red. Alleghanian Faunal Area of the Transition Zone, in blue. Canadian Faunal Area of the Boreal Zone, in green.

Admixture of Carolinian forms occurs in the lowlands and warmer valleys; of Boreal forms in the cooler uplands, swamps and gullies.

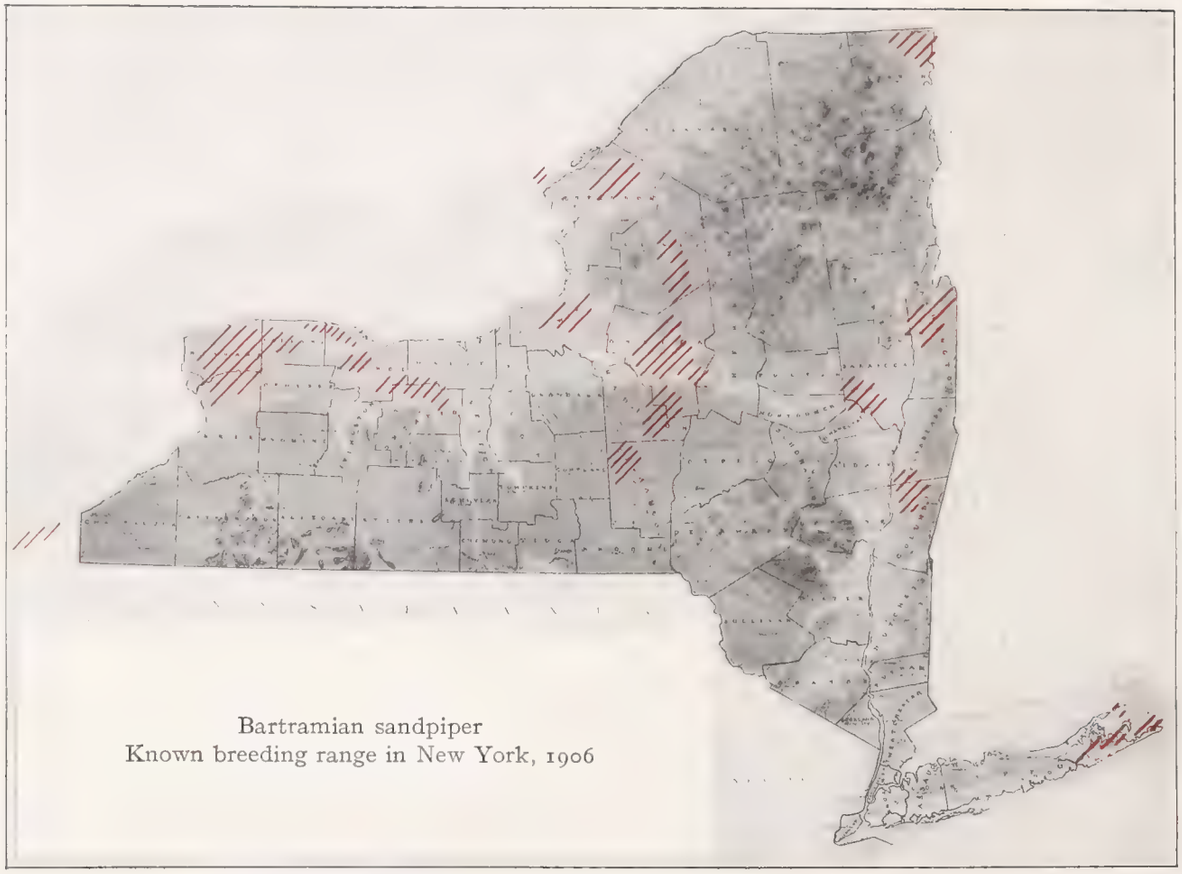
The darker shading shows the increase of altitude from below 500 feet in the Hudson valley and Ontario lowland to over 4000 feet in the Adirondacks and Catskills.

LIFE ZONES OF NEW YORK STATE

With reference to the distribution of plant and animal life in North America, Dr C. Hart Merriam has proposed to divide the continent into Boreal, Austral and Tropical "regions"[1] of which the first two are represented in New York. He has further divided these regions into "zones";[2] the Boreal region into the Arctic, Hudsonian and Canadian zones; and the Austral region into the Transition, Upper Austral, and Lower Austral zones. These zones of the Austral region are again divided into humid or eastern, and arid or western faunal areas, the eastern subdivision of the Transition zone being called the Alleghanian faunal area, and the eastern division of the Upper Austral zone, the Carolinian faunal area. These terms are so well recognized at the present time that they will be employed in this discussion of bird distribution in New York, the Carolinian, the Alleghanian, and the Canadian faunas, as well as a slight tinge of the Hudsonian, being represented within the State.

The limits of these zones, Dr Merriam determines by laws of temperature control [*loc. cit.* p. 54]. Taking the "sum of normal mean daily temperatures above 43°F. (6° C.)" as determining the northern limits of the respective zones, the plants and animals of the Lower Austral require an annual total of at least 18000° F. (10000° C.), those of the Upper Austral 11500° F. (6400° C.), and those of the Transition 10000° F. (5500° C.). "The southward distribution is governed by the mean temperature of a brief period during the hottest part of the year," the "normal mean temperature of the six hottest consecutive weeks" furnishing a satisfactory basis of determination. Thus the southern limit of the Hudsonian is estimated to be the isotherm for the six hottest weeks of 57.2° F. (14° C.), while the southern limit of the Canadian is found to be 64°.4 F. (18° C.), of the Transition 71°.6 F. (22° C.), of the Upper Austral 78°.8 F. (26° C.). The actual dis-

[1]The Geographic Distribution of Life in North America. Smithsonian Inst. Rep't, 1891, p. 365-415.
[2]U. S. Dep't Agric., Biol. Sur., Bul. 10, 1898, p. 18–31.



Bartramian sandpiper
Known breeding range in New York, 1906

Alder flycatcher
Known breeding range in New York, 1907

Yellow-bellied flycatcher, breeds
Green-crested flycatcher, breeds , occurs

Olive-sided flycatcher
Breeding range in New York, 1907

Orchard oriole
Breeds , occurs

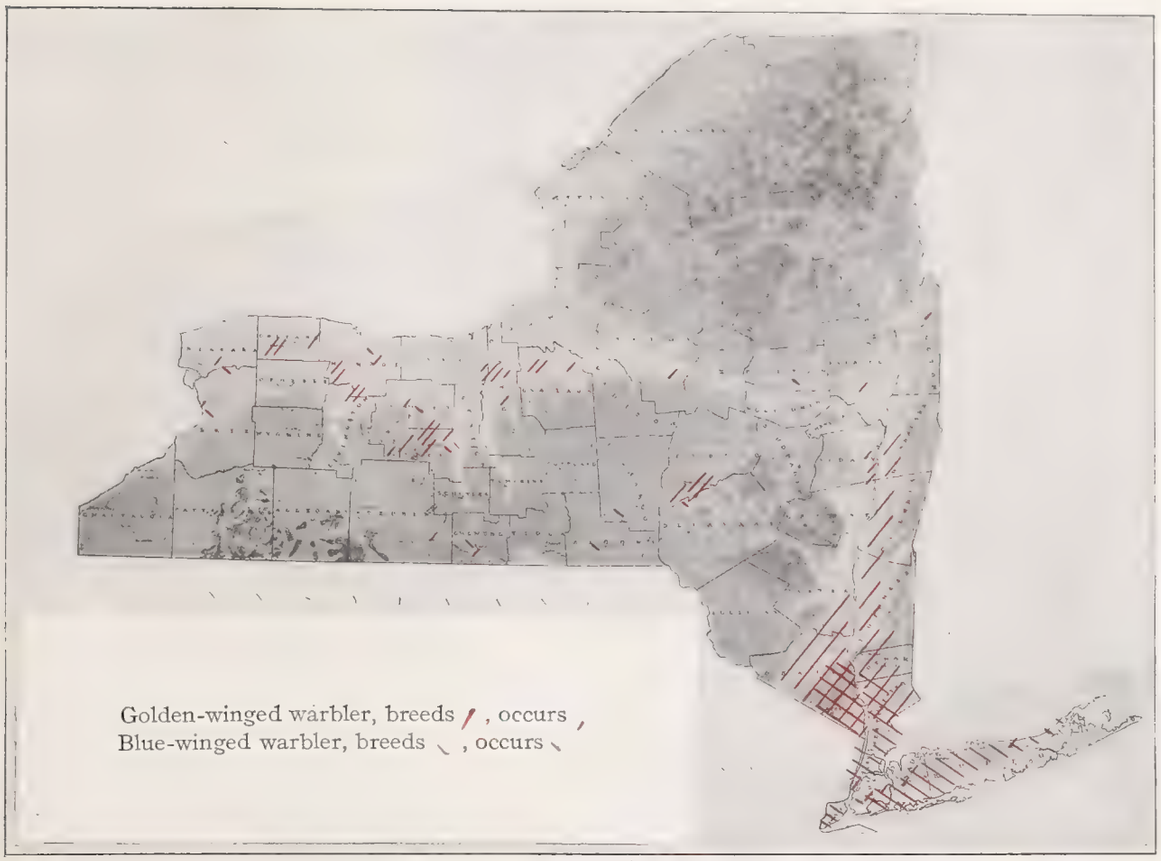
White-throated sparrow
Known breeding range, 1905

Junco
Known breeding range in New York, 1906

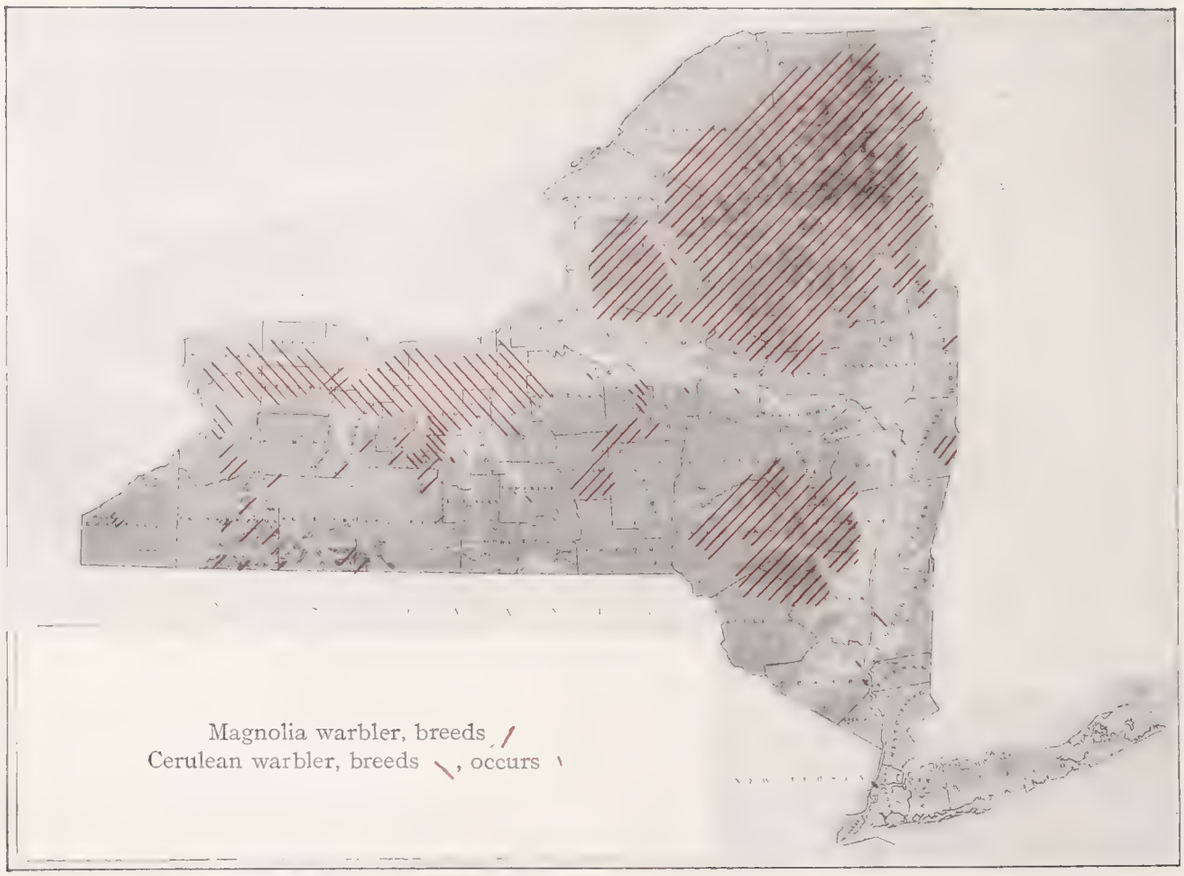
Grasshopper sparrow
Known breeding range in New York, 1906

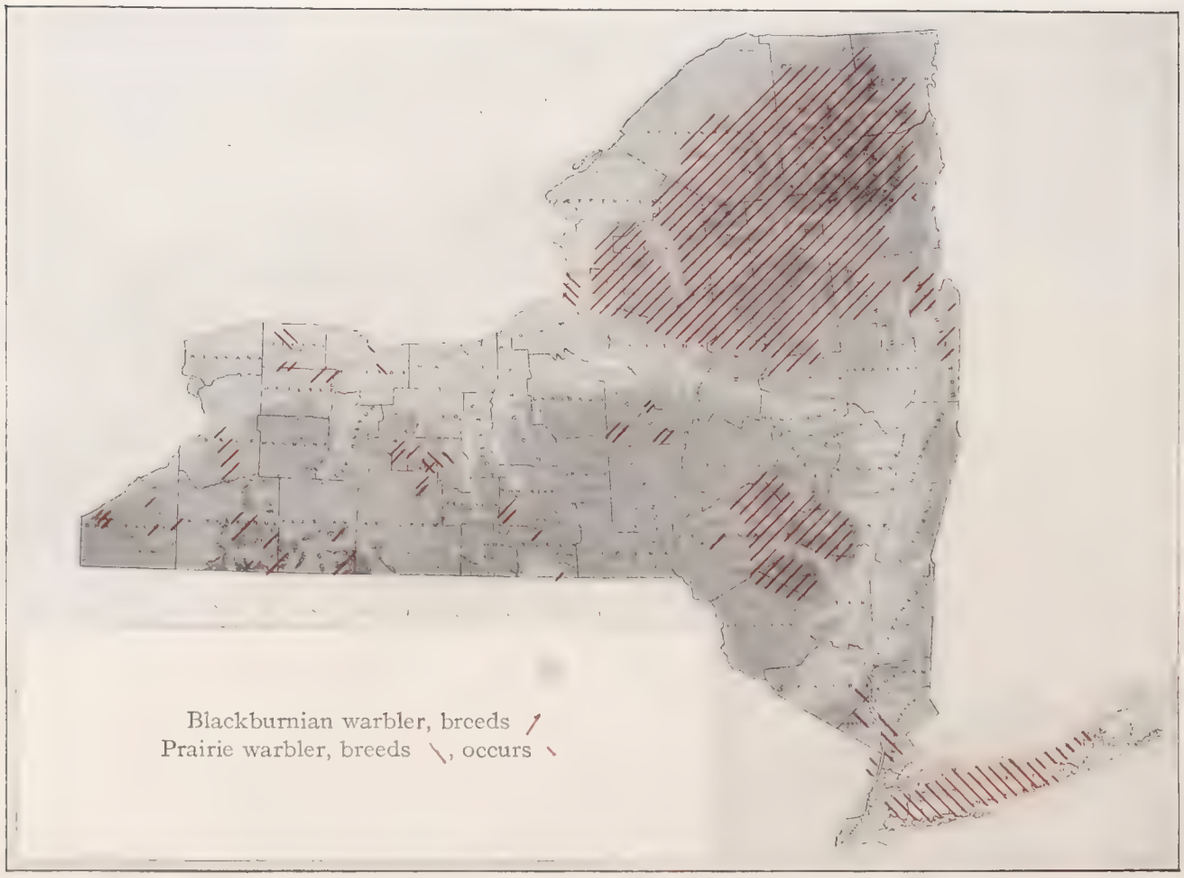
Rough-winged swallow
Known breeding range in New York, 1906

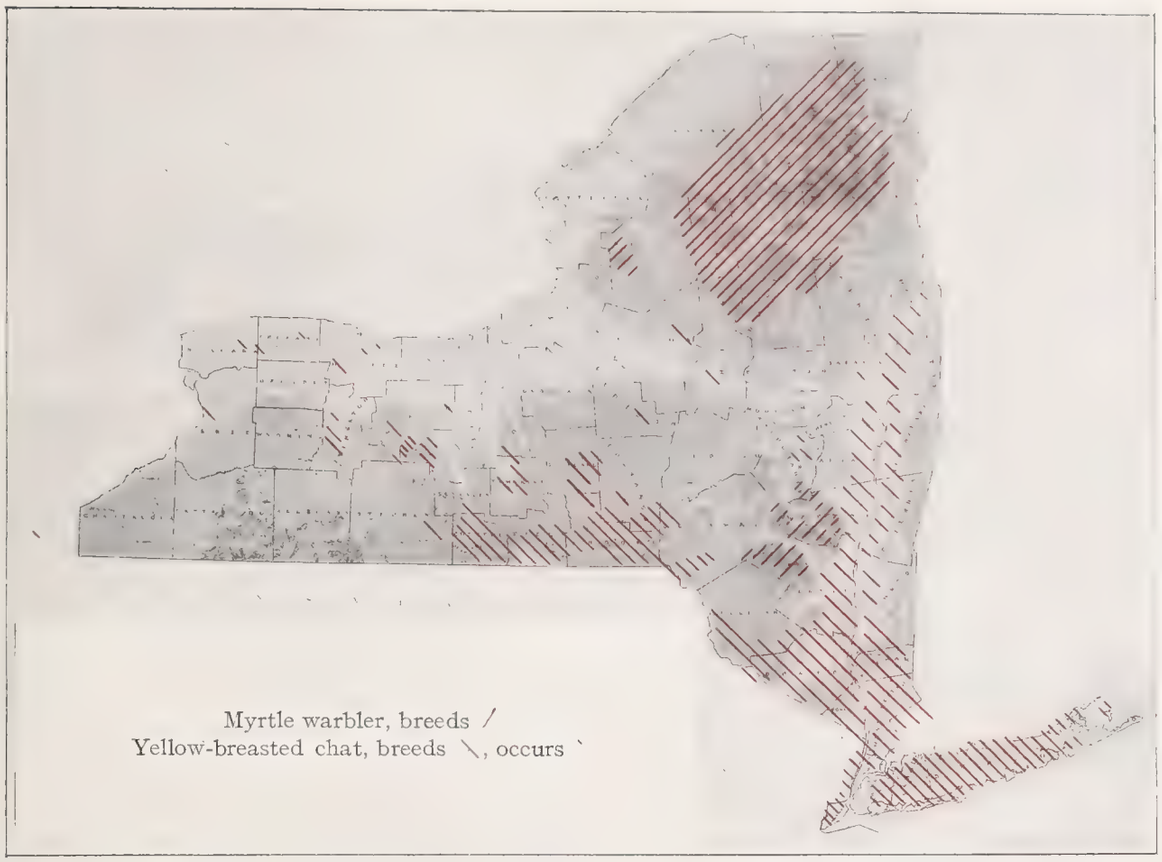
Blue-headed vireo, breeds /
White-eyed vireo, breeds , \ occurs \

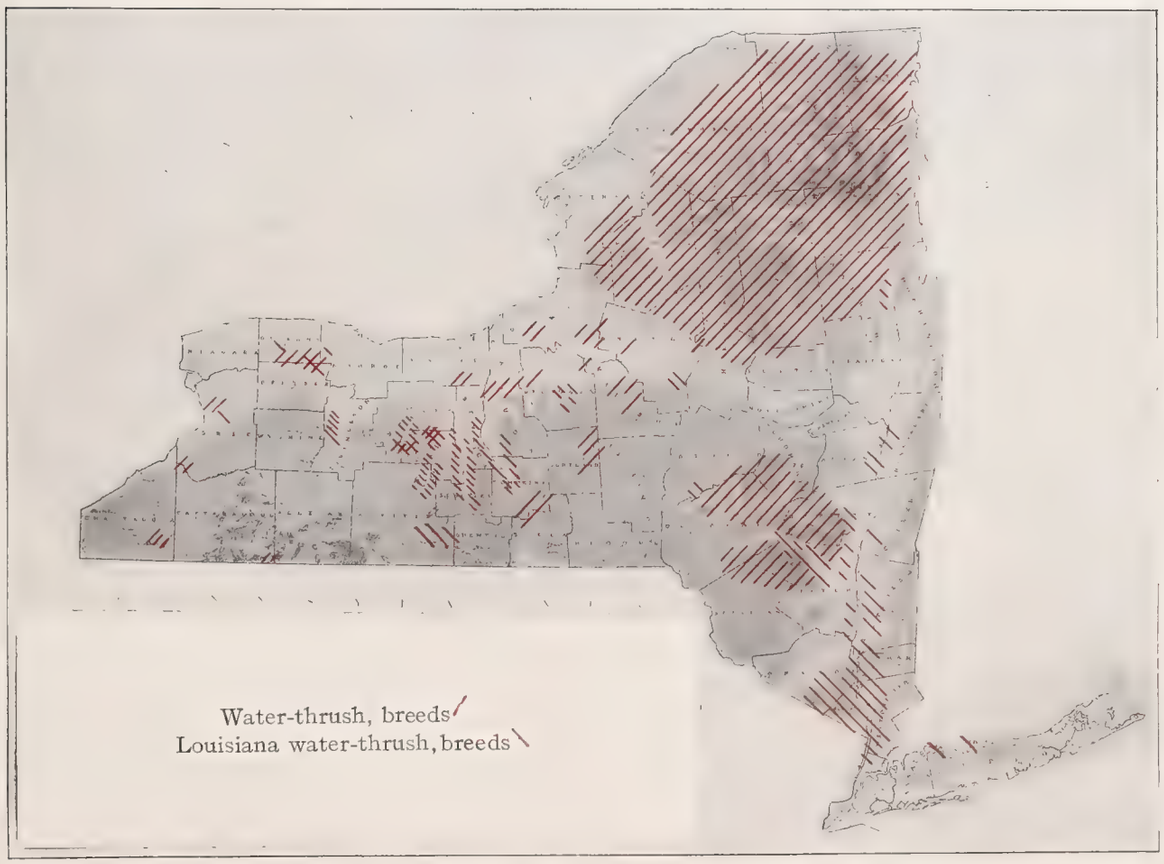

Golden-winged warbler, breeds , occurs
Blue-winged warbler, breeds , occurs

Black-throated blue warbler, breeds
Worm-eating warbler, breeds , occurs

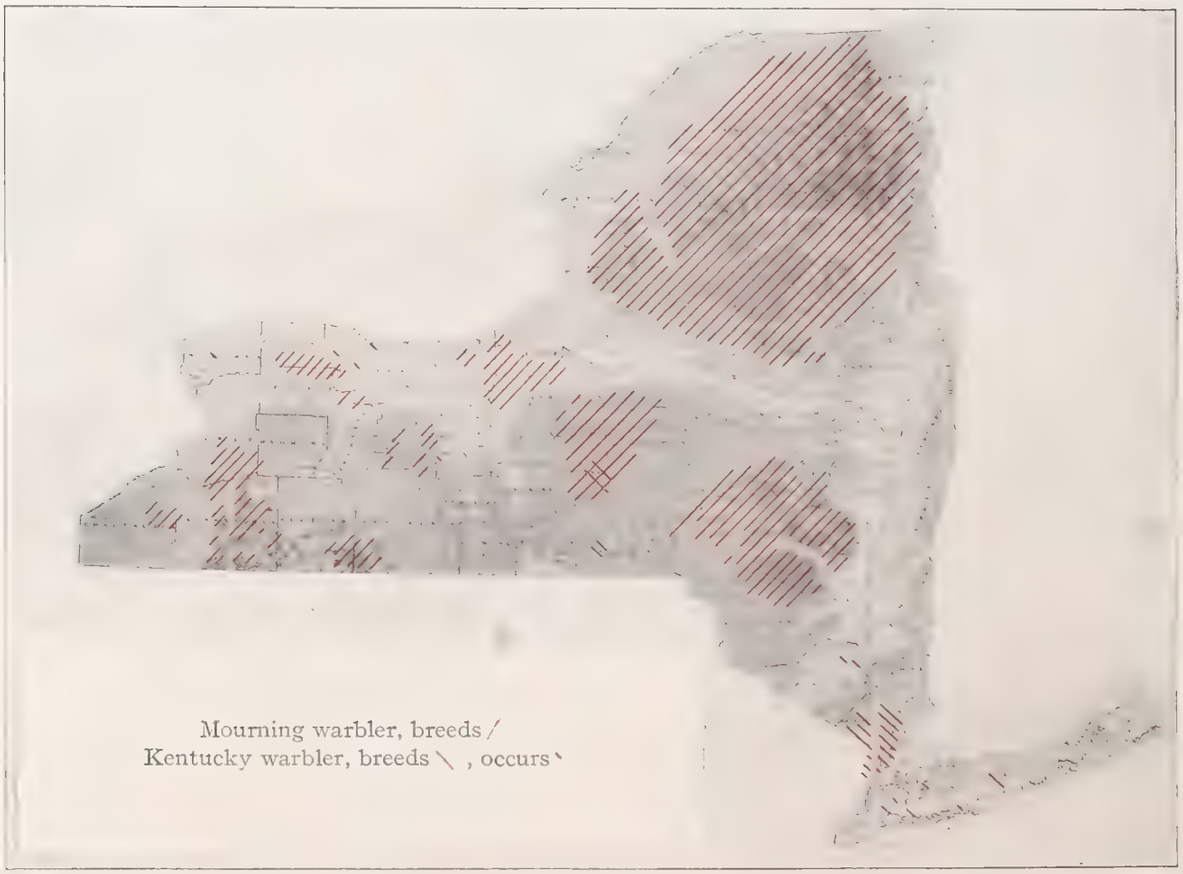

Magnolia warbler, breeds
Cerulean warbler, breeds , occurs

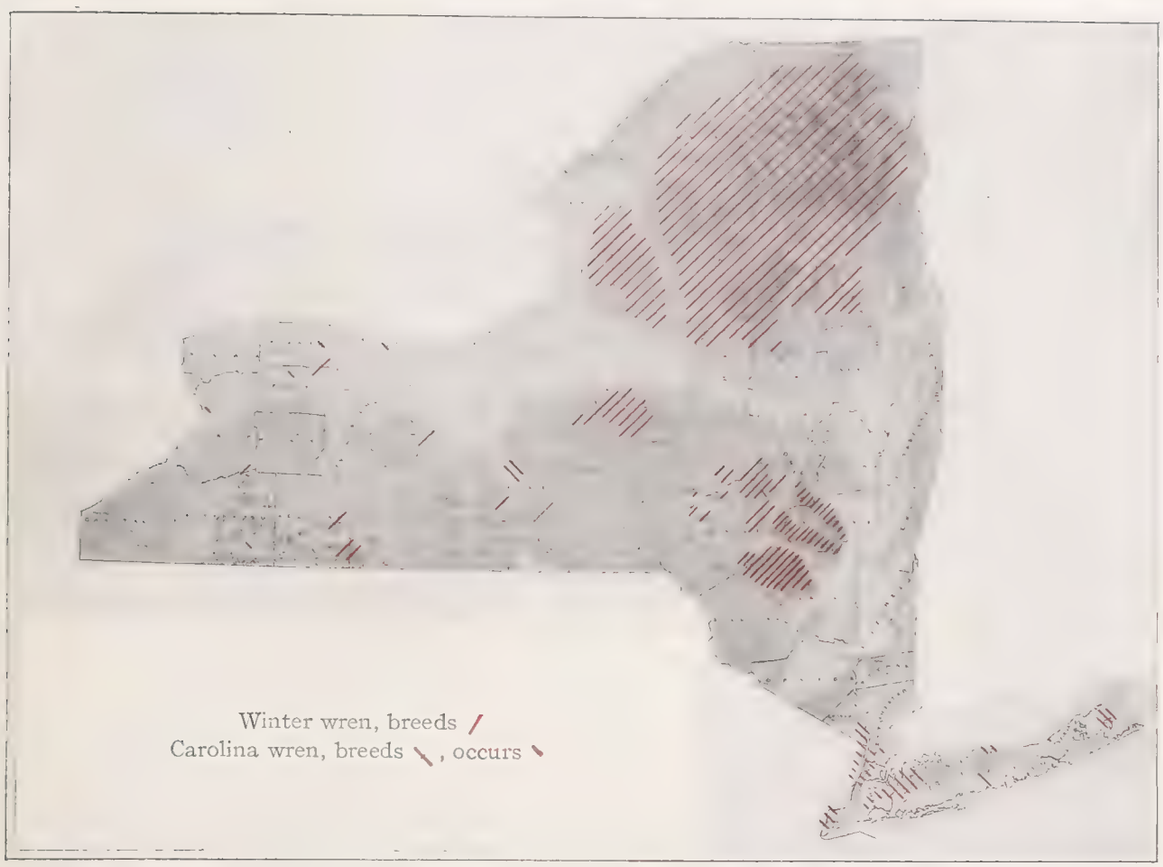

Blackburnian warbler, breeds
Prairie warbler, breeds , occurs

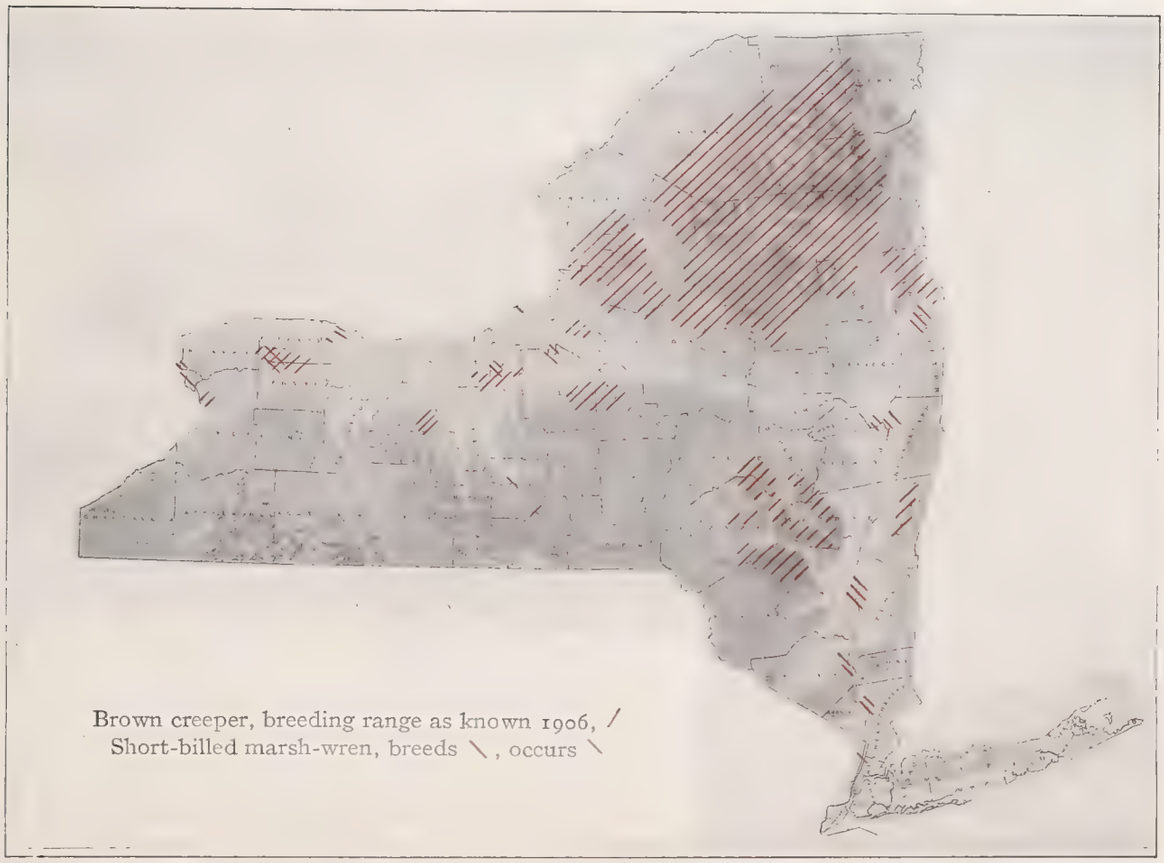

Myrtle warbler, breeds /
Yellow-breasted chat, breeds \, occurs `


Water-thrush, breeds /
Louisiana water-thrush, breeds \

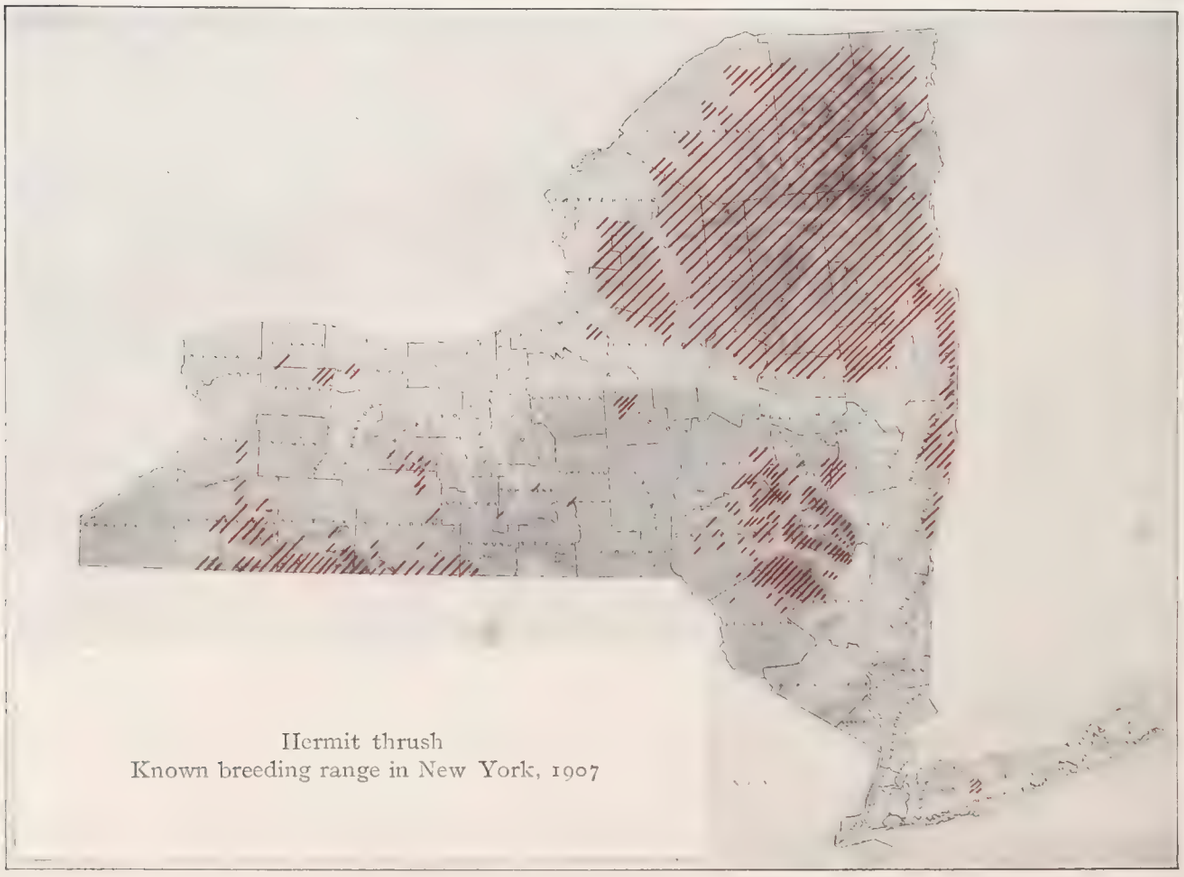
Canada warbler, breeds /, 1906
Hooded warbler, breeds \, occurs `


Mourning warbler, breeds /
Kentucky warbler, breeds \, occurs `


Winter wren, breeds /
Carolina wren, breeds \, occurs \


Brown creeper, breeding range as known 1906, /
Short-billed marsh-wren, breeds \, occurs \

Red-breasted nuthatch
Known breeding range, 1906
Tufted tit, breeds , occurs


Hermit thrush
Known breeding range in New York, 1907

tribution of plants and animals, which properly determines the boundaries of the life zones, agrees so nearly with the limits determined by these laws of temperature control that the boundaries shown on the maps of the Biological Survey have been fixed according to the temperature. This, while accurate in general, is slightly misleading when applied to the distribution of birds and mammals in New York State, on account of the peculiar conditions obtaining.

New York is so situated topographically that it neither connects intimately with the Boreal zone on the north nor with the Upper Austral on the south. The Adirondacks are separated from the main Canadian zone by lowlands of less than 500 feet elevation which are typically Alleghanian in fauna. The coastal region, Staten Island, Long Island, and the Lower Hudson valley, is practically or nearly shut off from the southern coastal plain by the encroachment of the New Jersey highlands and by the tidal waters, which though not wholly efficient as barriers, nevertheless check to an appreciable extent the influx of the usually sedentary species or less ambitious migrants of the Carolinian fauna. The Hudson valley, extending northward between two highlands of Boreal affinities, is still further cut off from easy connection with the Carolinian area by the extension of the Hudson highlands diagonally across the valley. The lowland of western New York is practically shut off from direct communication to the southward with the Carolinian area by the broad northern expansion of the Alleghany plateau which extends westward from the Catskills entirely across the southern portion of the State bordering on Pennsylvania. Thus the only efficient connection of this lowland with the Upper Austral is by a narrow strip along Lake Erie, and through southern Ontario and Michigan. For this reason the Carolinian birds which breed in the Lake Ontario lowland of New York are almost entirely migratory species like the Chat and Large-billed water-thrush, the more sedentary or resident species failing to establish themselves permanently on account of the severe winters with deep snows, which destroy such species as the Bobwhite and Carolina

wren. When these birds have once been killed off, before their successors can invade the country again by the difficult or circuitous route from their center of abundance in the south, other hard winters appear and thus they are held continually in check.

The Carolinian faunal area which is the eastern or humid division of the Upper Austral zone defined above, is the warmest of the life areas represented in New York. According to the temperature limits mentioned,this area would include Staten Island, the principal portion of Long Island, and the Hudson valley as far north as southern Saratoga county. "Counting from the north, the Carolinian area is that in which the sassafras, tulip tree, hackberry, sycamore, sweet gum, rose-magnolia, red bud, persimmon, and short-leaf pine first make their appearance, together with the opossum, gray fox, fox squirrel, Cardinal bird, Carolina wren, Tufted tit, Gnatcatcher, Summer tanager, and Yellow-breasted chat. Chestnuts, hickory nuts, hazelnuts, and walnuts grow in abundance" [Merriam]. These characteristic plants and animals are well represented in the vicinity of New York city, but, of the birds mentioned the Gnatcatcher and Summer tanager are not known to breed even on Staten Island. As one passes up the Hudson valley there is less and less evidence of the Carolinian flora, and, of the characteristic birds mentioned above, after the Highlands are passed only the Yellow-breasted chat is an established species. In western New York the sassafras, tulip tree and sycamore are well represented, but the opossum, gray fox and fox squirrel have rarely been taken, and must be regarded as only accidental. All the birds mentioned in the above quotation have occurred in western New York, but only the Yellow-breasted chat is an established breeding species, and is local in distribution.

The following table will show the proportion of Carolinian elements in the bird fauna of the different districts in New York which have been considered of Upper Austral affinities. The average temperature of the hottest six weeks of summer is taken from the records of the United States Meteorological Bureau.

Breeding Species	Staten Island (about 73° F.)	Lower Hudson 72.5–73.5° F.	Western Long Island 72–73.5° F.	Eastern Long Island 71–72.4° F.	Upper Hudson 71–73° F.	Western New York lowland 69–71° F.
Bobwhite	f c	f c	f c	f c	rare	rare
Orchard oriole	f c	c	c	f c	unc	rare
Grasshopper sparrow	c	c	c	c	f c	f c
Cardinal	unc	unc	rare	——	——	——
Rough-winged swallow	unc	unc	unc	unc	unc	f c
White-eyed vireo	c	c	c	f c	unc	rare
Blue-winged warbler	f c	c	c	unc	——	——
Golden-winged warbler	——	unc	rare	?	unc	unc
Prairie warbler	——	unc	c	c	——	rare
Louisiana water-thrush	——	c	?	——	f c local	c local
Kentucky warbler	——	unc	——	?	——	?
Yellow-breasted chat	c	c	c	f c	unc	unc local
Hooded warbler	unc	c	——	——	——	c local
Carolina wren	unc	f c local	unc	c local	——	?
Tufted titmouse	f c	——	——	?	——	——

c=common; f c=fairly common; unc=uncommon

It is evident that the western New York lowland both from its temperature and its fauna is Alleghanian with a slight admixture of Carolinian forms. The Bobwhite, Grasshopper sparrow, Rough-winged swallow, Golden-winged warbler, Prairie warbler, Louisiana water-thrush, and Hooded warbler are not strictly Carolinian species, but all have their northern breeding limit in the Alleghanian (Transition zone), although they are more common in the Carolinian (Upper Austral) zone. In the case of Mammalia western New York is even more strongly Alleghanian.

On account of the great diversity of soils, slopes and drainage systems in New York, and the greater or less isolation of its cold and warm areas,

there is often a peculiar intermingling of northern and southern forms. Thus, species which are ordinarily regarded as Carolinian may be found breeding side by side with Canadian species, and although the Alleghanian species are the most abundant in those localities, the Transition zone seems to have lost its special character by the Carolinian fauna being joined directly with the Canadian. This effect though noticeable to a certain extent in the Catskill region, as has been shown by Mr Bicknell, is particularly evident in western New York as will be seen in the account of the Potter Swamp area. The plateau and lowland of western New York west of the 75th meridian slopes from an altitude of about 2000 feet near the Pennsylvania line to 250 feet on Lake Ontario. Though its slope and drainage is chiefly to the north, the waters of this region reach the sea at such widely diverse points as the Gulf of St Lawrence, New York bay, Delaware bay, Chesapeake bay and the Gulf of Mexico. The plateau region thus is reached by the narrow extension northward of the Delaware, Susquehanna and Alleghany valleys, but at such a high altitude that few southern forms are introduced by those routes. There is little or no evidence that Carolinian forms come into western New York by way of the Mohawk valley, but the chief influx is from the west by way of southern Ontario, and along the southern shore of Lake Erie, and from the south along the Delaware and Susquehanna valleys. In the Adirondacks and Catskills the Canadian fauna is entirely surrounded by the Alleghanian which ascends all the valleys to the very hearts of those regions. The eastern end of Long Island, cooled by the sea, is mostly Alleghanian in its fauna, but still strongly tinged with the Carolinian.

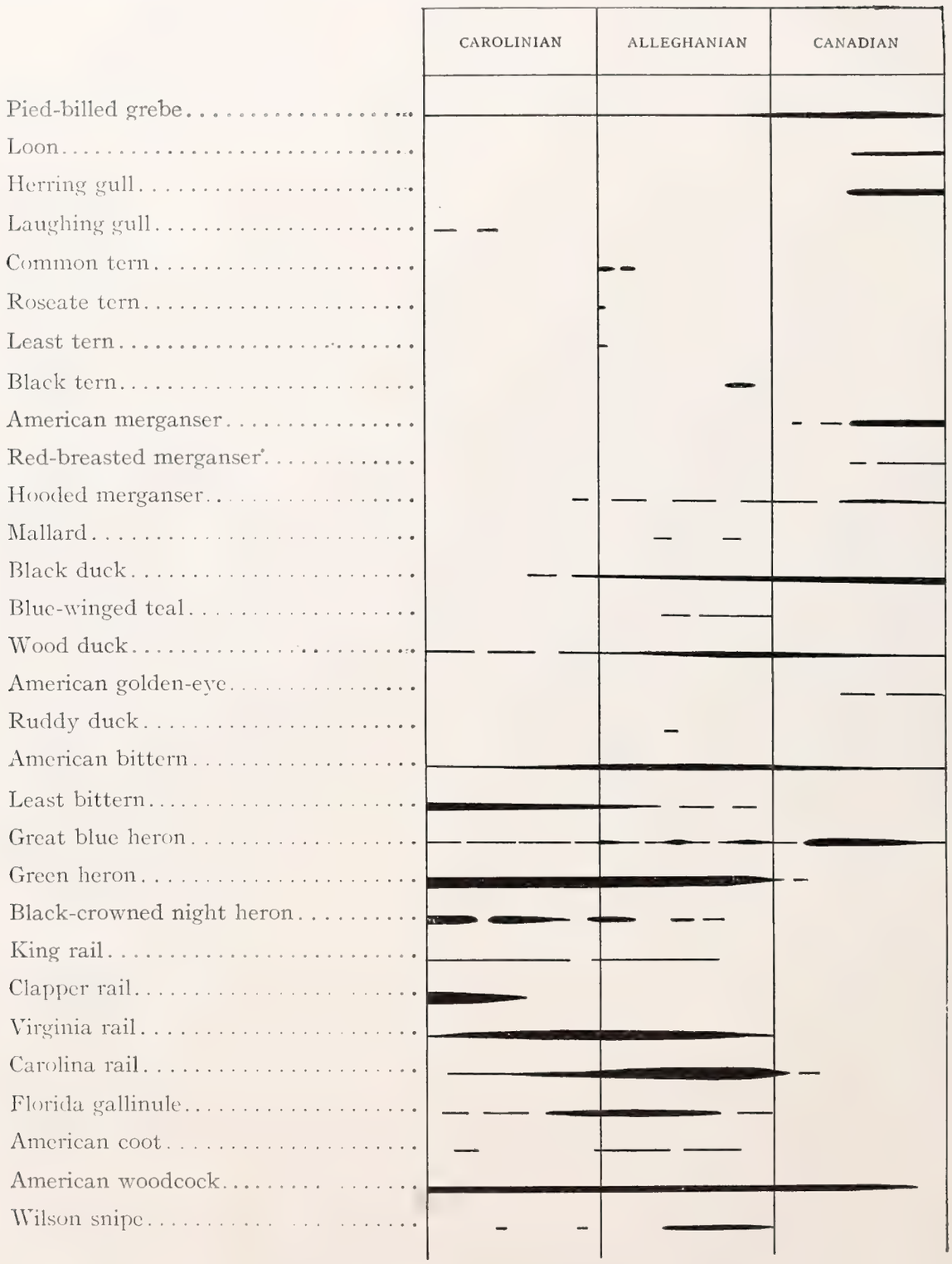
The Alleghanian faunal area in New York, though perplexing to map out accurately, certainly includes the greater portion of the State and its birds are the most abundant and well known in all localities from Long Island to the spruce and fir line of the Catskills and Adirondacks. In this area "the chestnut, walnut, oaks, and hickories of the south meet and overlap the beech, birch, hemlock, and sugar maple of the north; the southern mole and cottontail rabbit meet the northern star-nosed and Brewer's moles and varying hare, and the southern bobwhite, Baltimore oriole, bluebird, catbird, chewink, thrasher, and wood thrush live in or near the

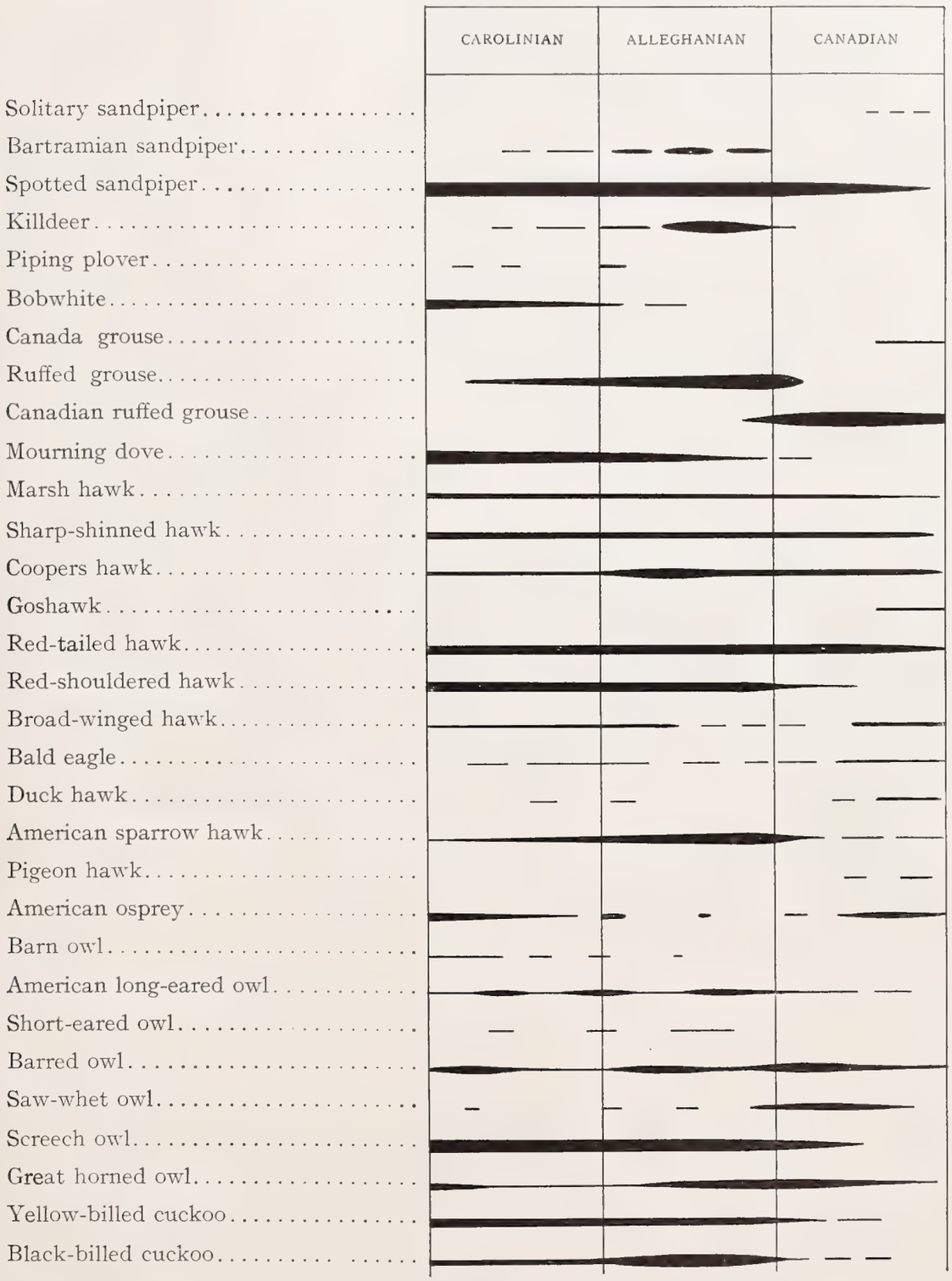
haunts of the bobolink, solitary vireo, and the hermit and Wilson thrushes." This quotation from Dr Merriam meets the conditions throughout western New York excepting that the southern mole and Bobwhite are rare or absent in most localities and the Solitary vireo seems to be more allied with the Canadian fauna. The same statement might be applied to the borders of the Catskill and Adirondack regions, as far as the spruce and fir line.

The Canadian zone comprises the southern part of the great transcontinental coniferous forest of Canada, the northern parts of Maine, New Hampshire, and Michigan, the Green mountains, Adirondacks and Catskills, and the higher mountains of Pennsylvania, West Virginia, Virginia, western North Carolina, and eastern Tennessee. Among the many characteristic mammals and birds of the Canadian zone are the lynx, marten, porcupine, northern red squirrel, varying rabbit, star-nosed and Brewer's moles, voles, long-tailed shrews, northern jumping mice, white-throated sparrow, Blackburnian and yellow-rumped warblers, olive-backed thrush, three-toed woodpecker, spruce grouse, crossbills, and Canada jays.

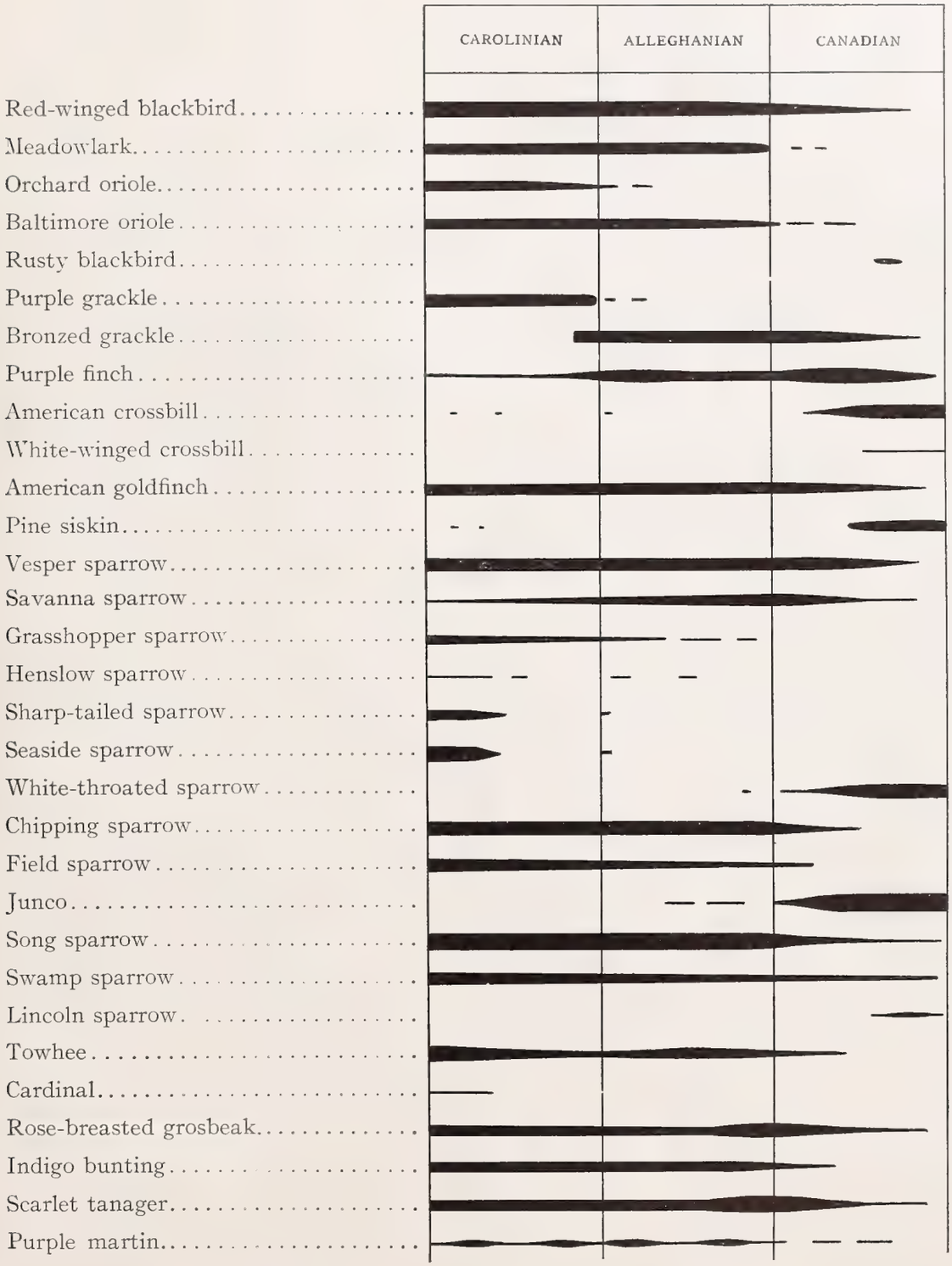
The Adirondack country, after the spruce and fir line is passed, is purely Canadian in its fauna, but the Alleghanian birds, which surround it on all sides, invade it along the cleared tracts and river valleys. All the mammals and birds mentioned above as characteristic of the Canadian zone breed in the Adirondacks. In the Catskills a higher altitude must be reached before the Canadian plants and animals are met with but the higher summits are all Canadian although the Spruce grouse, Canada jay, and American three-toed woodpecker are not natives of that country. The highlands along the Pennsylvania border in southwestern New York and numerous swamps and ravines in eastern New York, the central lake region, and western New York, wherever the altitude is above 1000 feet, are strongly tinged with the Canadian fauna, showing all gradations from the condition exhibited in the Catskills to that found in Bergen swamp, Genesee county, and the smaller gullies of the lower Finger Lakes, where two or three Canadian birds may be found nesting with the generally distributed transition species.

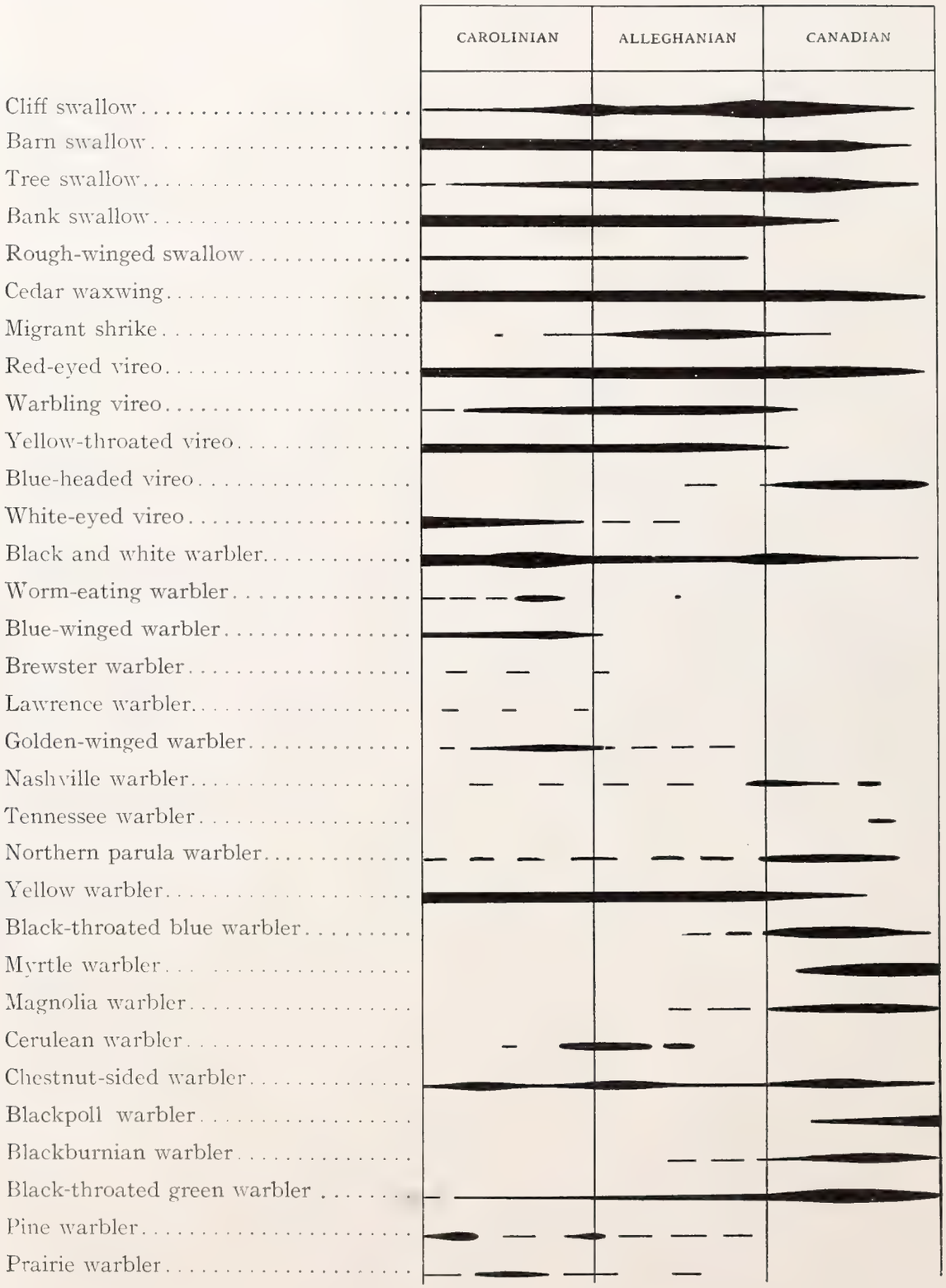
The following chart will illustrate the distribution of all our breeding species in the three life zones of New York.

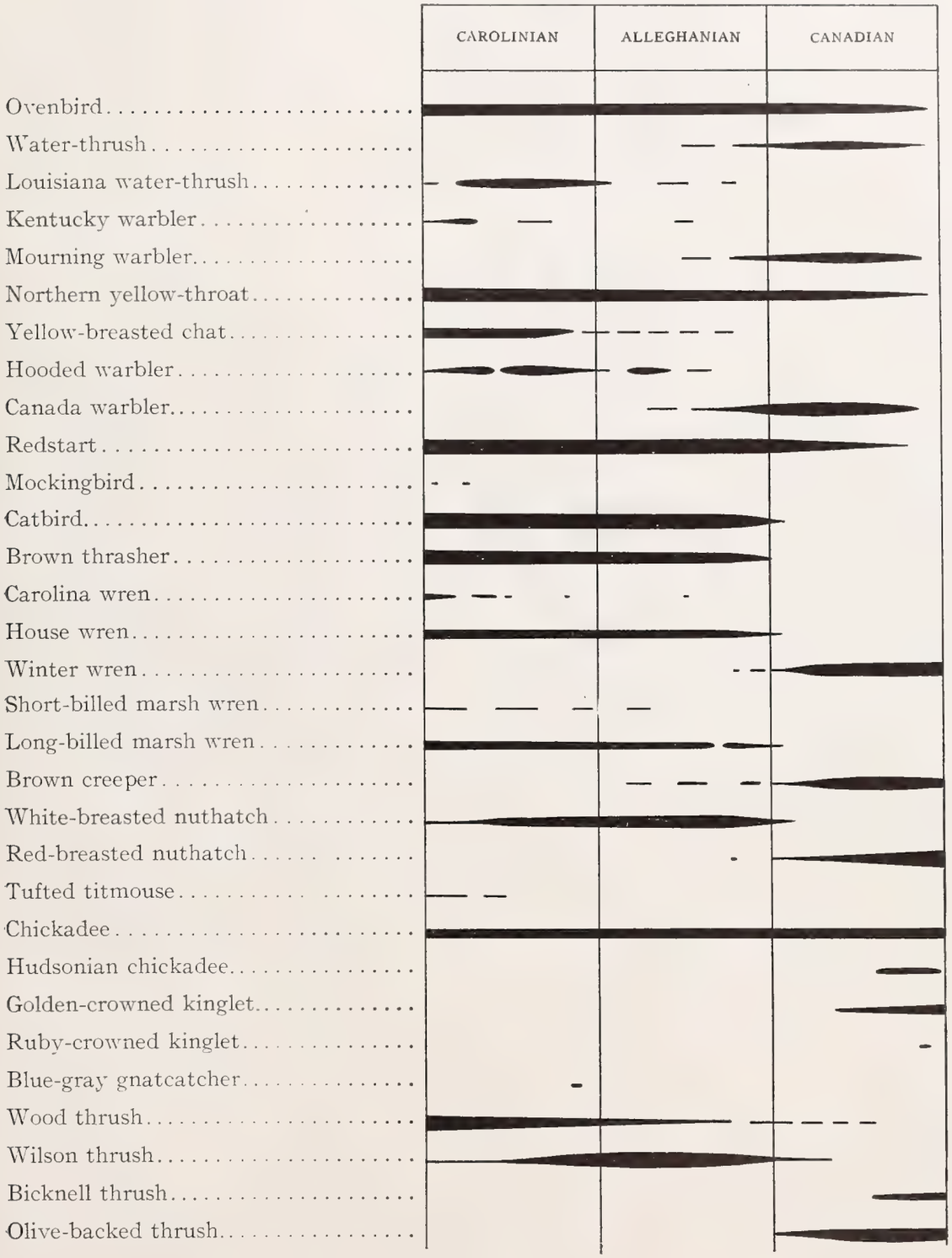

CAROLINIAN
ALLEGHANIAN
CANADIAN
Pied-billed grebe
Loon
Herring gull
Laughing gull
Common tern
Roseate tern
Least tern
Black tern
American merganser
Red-breasted merganser
Hooded merganser
Mallard
Black duck
Blue-winged teal
Wood duck
American golden-eye
Ruddy duck
American bittern
Least bittern
Great blue heron
Green heron
Black-crowned night heron
King rail
Clapper rail
Virginia rail
Carolina rail
Florida gallinule
American coot
American woodcock
Wilson snipe

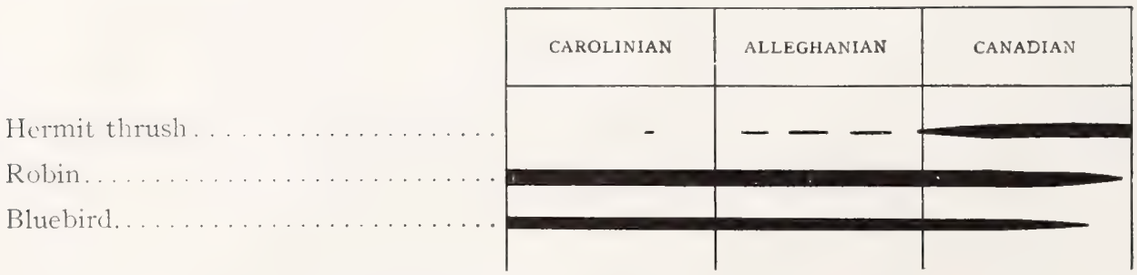

CAROLINIAN
ALLEGHANIAN
CANADIAN
Solitary sandpiper
Bartramian sandpiper
Spotted sandpiper
Killdeer
Piping plover
Bobwhite
Canada grouse
Ruffed grouse
Canadian ruffed grouse
Mourning dove
Marsh hawk
Sharp-shinned hawk
Coopers hawk
Goshawk
Red-tailed hawk
Red-shouldered hawk
Broad-winged hawk
Bald eagle
Duck hawk
American sparrow hawk
Pigeon hawk
American osprey
Barn owl
American long-eared owl
Short-eared owl
Barred owl
Saw-whet owl
Screech owl
Great horned owl
Yellow-billed cuckoo
Black-billed cuckoo

CAROLINIAN
ALLEGHANIAN
CANADIAN
Belted kingfisher
Hairy woodpecker
Downy woodpecker
Arctic three-toed woodpecker
American three-toed woodpecker
Yellow-bellied sapsucker
Northern pileated woodpecker
Red-headed woodpecker
Red-bellied woodpecker
Northern flicker
Whip-poor-will
Nighthawk
Chimney swift
Ruby-throated hummingbird
Kingbird
Crested flycatcher
Phoebe
Olive-sided flycatcher
Wood pewee
Yellow-bellied flycatcher
Green-crested flycatcher
Alder flycatcher
Least flycatcher
Prairie horned lark
Blue jay
Canada jay
Northern raven
American crow
Fish crow
Bobolink
Cowbird


CAROLINIAN
ALLEGHANIAN
CANADIAN
Red-winged blackbird
Meadowlark
Orchard oriole
Baltimore oriole
Rusty blackbird
Purple grackle
Bronzed grackle
Purple finch
American crossbill
White-winged crossbill
American goldfinch
Pine siskin
Vesper sparrow
Savanna sparrow
Grasshopper sparrow
Henslow sparrow
Sharp-tailed sparrow
Seaside sparrow
White-throated sparrow
Chipping sparrow
Field sparrow
Junco
Song sparrow
Swamp sparrow
Lincoln sparrow
Towhee
Cardinal
Rose-breasted grosbeak
Indigo bunting
Scarlet tanager
Purple martin


CAROLINIAN
ALLEGHANIAN
CANADIAN
Cliff swallow
Barn swallow
Tree swallow
Bank swallow
Rough-winged swallow
Cedar waxwing
Migrant shrike
Red-eyed vireo
Warbling vireo
Yellow-throated vireo
Blue-headed vireo
White-eyed vireo
Black and white warbler
Worm-eating warbler
Blue-winged warbler
Brewster warbler
Lawrence warbler
Golden-winged warbler
Nashville warbler
Tennessee warbler
Northern parula warbler
Yellow warbler
Black-throated blue warbler
Myrtle warbler
Magnolia warbler
Cerulean warbler
Chestnut-sided warbler
Blackpoll warbler
Blackburnian warbler
Black-throated green warbler
Pine warbler
Prairie warbler


CAROLINIAN
ALLEGHANIAN
CANADIAN
Ovenbird
Water-thrush
Louisiana water-thrush
Kentucky warbler
Mourning warbler
Northern yellow-throat
Yellow-breasted chat
Hooded warbler
Canada warbler
Redstart
Mockingbird
Catbird
Brown thrasher
Carolina wren
House wren
Winter wren
Short-billed marsh wren
Long-billed marsh wren
Brown creeper
White-breasted nuthatch
Red-breasted nuthatch
Tufted titmouse
Chickadee
Hudsonian chickadee
Golden-crowned kinglet
Ruby-crowned kinglet
Blue-gray gnatcatcher
Wood thrush
Wilson thrush
Bicknell thrush
Olive-backed thrush



THE MT MARCY REGION

During the summer of 1905, beginning on the 15th of June and ending the first week of August, the author and his assistants undertook a survey of the bird life about the Ausable lakes and Mt Marcy slopes. The especial object of this study was to obtain an exhaustive list of the birds nesting in the highest portion of the Adirondack wilderness, and to estimate as nearly as possible the relative abundance of each species. The thrushes, warblers, and sparrows were mostly in full voice, and the number of pairs of breeding birds could easily be counted while passing through the woods or along the trails. The attempt was made to give a fair consideration both to the virgin forest which is very extensive in the lands of the Adirondack Forest Reserve; to the spruce swamps, sphagnum bogs and extensive slashings of the McIntyre Iron Co.; and to the clearings about Keene Valley, Elk lake, Boreas River, and John Brown's grave, as well as to the higher portions of the Boreas range, Bartlett ridge and the high peaks of the Adirondacks such as Marcy, Skylight, Haystack, Colvin and Whiteface.

In the virgin forest, birds, in general, were much less numerous than about the slashings, clearings, burnt tracts and swamps. A few species seemed to be quite generally distributed even in the dense forest. These were the Olive-backed thrush, Hermit thrush, Chickadee, Red-bellied nuthatch, Brown creeper, Winter wren, Ovenbird, Black-throated green warbler, Blackburnian warbler, Myrtle warbler, Black-throated blue warbler, Red-eyed vireo, Blue jay, Yellow-bellied sapsucker, and Canadian ruffed grouse. But even these species were more numerous near the edges of lakes or clearings, or along the borders of swamps and streams.

It was a matter of surprise to find so few hawks and owls in the woods. The owls were mostly silent, except the Barred owl, and so were overlooked, but no evidence was secured from the inhabitants, or otherwise, that any other species of owl was common in this region. The commonest hawks in order were the Broad-winged, Coopers and Red-tailed. There was some evidence of one family each of the Sharp-shinned hawk, Pigeon and Goshawk, and the eyrie of a pair of Duck hawks was found on Lower Ausable lake and a family of Sparrow hawks near John Brown's grave. The Red-shouldered hawk was not located nearer than Saranac river where one family was found in August. None of these hawks was common and we do not believe that more than six pairs of Broad-winged hawks, four pairs of Coopers hawks, and three pairs of Red-tailed hawks nested within 6 miles of Mt Marcy.

Water birds were very scarce. One family of American mergansers was reared on Elk lake and one pair of Pied-billed grebes was endeavoring to nest there. American bitterns were breeding on the same lake, but had been destroyed by reckless tourists. Herring gulls paid daily visits to Elk lake and sometimes to Upper Ausable and were evidently nesting somewhere south of these lakes. A small colony of Great blue herons was located in the marshes of Boreas pond. We learned that Wood ducks in previous seasons had nested on Boreas pond and a "Sawbill" had had a nest of 11 eggs under a tussock of grass on Elk river. This was evidently a Red-breasted merganser. Woodcock were almost unknown in Keene Valley, but families of these birds were found 3 miles below Elk lake and at Boreas pond. Spotted sandpipers with downy young were found both at Boreas pond and at Elk lake and birds of this species were seen several times in Keene Valley and the Ausable lakes.

Eagles and ospreys were not nesting in this immediate vicinity. One osprey came fishing frequently to the Upper Ausable from some point southward and we judged from the time she was absent after taking a fish, that her nest was several miles distant. One Bald eagle was seen passing over Haystack and we learned that it had bred recently on the high slopes

overlooking the Cascade lakes, but evidently was not breeding nearer than Taylor pond to the northeast of Whiteface, in 1905.

Neither species of cuckoo was found in the forest, but it was learned that they were sometimes observed in Keene Valley and in other places about the edges of the woods. Kingfishers were found on all the lakes and streams, but were decidedly uncommon on the heavily wooded waters. Woodpeckers of all species known to the State, with the exception of the Red-bellied woodpecker, were unquestionably breeding within 15 miles of Mt Marcy. The Red-headed woodpecker was not found nearer than 3 miles below Elk lake, and the Flicker is confined to clearings and slashings. The Hairy woodpecker was decidedly more common than the Downy, and next to the Yellow-bellied sapsucker, was probably the commonest woodpecker in the forests. Sapsuckers were abundant and invariably awoke us at dawn by their loud and continuous drumming. Many of their nests containing young were found in beech and birch stubs, usually about 25 feet from the ground. and almost without exception, under cover of the dense woods. The Black-backed three-toed woodpecker was fairly common and was found both in the spruce swamps about the lakes and on the wooded ridges to an altitude of 3900 feet. The American three-toed woodpecker was nearly as common as the Black-backed species, but only two families of young were found, one of these being on the slope of Mt Marcy at an altitude of 4000 feet. Pileated woodpeckers were not seen by any of our party but were heard on three occasions, and we learned on good authority, that they were breeding near St Huberts and at Boreas pond.

Chimney swifts were common about clearings and old lumber camps, their nests being fastened to the boards in the gable ends of the deserted shacks. Hummingbirds were frequently noticed, both in the dense woods, and the second growth about the lumber camps. Nighthawks were breeding at Boreas pond and Elk lake, but whip-poor-wills were not living nearer than the road from Elizabethtown to Placid.

Kingbirds were observed at Elizabethtown, Keene Valley, Elk lake and Boreas pond; Crested flycatchers, at Elizabethtown and North River.

Phoebes were confined to the outskirts of the district in the more inhabited localities, but Wood pewees were found about the old lumber camps and slashings to an altitude of 3500 feet within 5 miles of the summit of Mt Marcy. Least flycatchers lived in many of the burnt tracts and clearings which had grown up to poplars, one pair being found on the slopes of Mt Colvin above the Lower Ausable lake and several pairs about Elk lake. Alder flycatchers inhabit the swamps at the head of the Upper Ausable and about Elk lake and Boreas pond, being next to the Olive-sided flycatcher the most conspicuous member of the family. The latter species was fairly common in all the swamps and in many of the slashings to an altitude of 3800 feet. Yellow-bellied flycatchers were confined mostly to the cool, mossy slopes, like those of Indian head and Geological cobble, Marcy and Haystack, where we found them nesting in July. During our second visit to Elk lake on July 23d, several of this species were also seen and heard in different localities about the lake. It is probable that both this species and the Alder flycatcher were actually as common as the Olive-sided, but were more often overlooked as usually it was necessary to be within 20 rods of them before they were discovered, while the Olive-sided flycatcher could often be seen and heard at a distance of several hundred yards whenever we came in its vicinity. A brood of Prairie horned larks, just able to fly, was seen at Elizabethtown but none at Elk lake or at Boreas pond clearing, although it is probable that this bird nests generally about the edges of the wilderness wherever there is grass land of sufficient extent. The Blue jay was one of the most generally distributed birds of the region, being conspicuous everywhere, both about the clearings and in the depths of the forest to an altitude of 4000 feet. The Canada jay was confined mostly to the dense swamps about the head of the Upper Ausable, Elk lake and Boreas ponds, but was seen on the summit of Bartlett ridge, July 3d. Crows were uncommon at this season, except about the larger clearings, and none were seen nearer than Keene Valley, Clear pond, and the Flowed land. No ravens inhabited the region. We were told by Mr Scott Brown, Superintendent of the Forest Reserve, that they were found

only in late fall and winter and he had seen only two within 15 years. Bobolinks bred in the meadows of Keene Valley and Boreas camp. Red-winged blackbirds bred sparingly at Keene Valley, Elk lake, Clear pond and Boreas pond. Bronzed grackles were nesting at Elk lake and Boreas camp, but were by no means common. We failed to find meadowlarks, cowbirds or orioles within 15 miles of Marcy, but Baltimore orioles were living at Ausable Forks, and both Baltimore and Orchard orioles were observed on the road from Boreas River to Port Henry.

The family Fringillidae was represented in the woods by the Purple finch, Pine siskin, White-throated sparrow, Junco, and Rose-breasted grosbeak; the Junco and White-throat being among the commonest birds of the region. The Purple finch was fairly common about the swamps and streams. Several large flocks of Pine siskins containing immature birds were seen from June 17th to July 5th, both at Beede, the Upper Ausable and Boreas pond. Mr Cox of the Boreas camp informed us that they had been there through the winter and spring and had nested very early in the season, as was proven by several specimens taken on June 17th which, though feeding themselves, were in immature plumage. The Rose-breasted grosbeak was seen on three occasions in the vicinity of the Upper Ausable and Elk lake, and on July 22d a pair with young was found on the Elk lake trail at an altitude of 2200 feet. Swamp sparrows were common at Elk lake and Upper Ausable inlet and the Flowed land. Song sparrows were common about all the clearings and one pair was found at the head of the Upper Ausable and another on the Stillwater above the Upper Ausable. Field sparrows were found at Beede and along the Elk lake road. American goldfinches, Vesper sparrows, Savanna sparrows and Chipping sparrows were breeding about all the clearings visited. One Indigo bird was seen at the entrance to Keene Valley. The English sparrow was common at Elizabethtown and Beede, but had not yet reached Elk lake and Boreas pond. One flock of crossbills was seen on the Upper Ausable, and as Dr Merriam and Dr Ralph have found them breeding in the western Adirondacks, they probably breed also in the vicinity of Mt Marcy. Mr Richard

of the State Museum observed a Chewink, on July 5th, along the road from Boreas River to Port Henry and we were informed that they were sometimes seen at Elk lake clearing. A Lincoln sparrow was observed in the Upper Ausable swamp by Mr Taylor, but on account of its extreme shyness, the specimen could not be secured. The Junco and White-throated sparrow were common all the way from Elizabethtown to the summit of Mt Marcy and were singing throughout our stay of six weeks. These two species together with the Myrtle and Blackpoll warblers were conspicuous near the summit of all the mountains visited, particularly Skylight, Marcy, Haystack and Whiteface, but the juncoes were by far the commonest on the extreme summits where they frequently gathered to feed upon the remnants of lunches left by tourists.

The Scarlet tanager was fairly common at Beede, and on the Elk lake trail at an altitude of 2500 feet a pair with young was discovered on July 6th. Cliff swallows were common about all the clearings, and breeding colonies were noted at Westport, Spruce hill, Keene Valley, Boreas camp, Elk lake and Proctors. On July 14th, while our party was on the summit of Skylight, a single Cliff swallow was seen flying over the summit, but no nests were discovered about the rocky ledges. Barn swallows were common in all the clearings and often were found nesting over the cabin doors. Tree swallows were noticed in several localities and were breeding commonly at Elk lake and Boreas pond. Small colonies of Bank swallows were found at Beede and Boreas pond. Mr Richard found them common at Port Henry and Boreas River and also noticed a pair of Rough-winged swallows at the latter place, altitude 1700 feet. The Cedar waxwing was common along the swamps and streams.

Only two species of Vireo were found within 10 miles of Mt Marcy. The Red-eyed species was common throughout the woods to an altitude of 3300 feet. Blue-headed vireos were found nesting in the Ausable swamp and on the Marcy trail at an altitude of 2200 feet. Although no Warbling vireos were met with, Mr C. F. Batchelder says that they are found about the streets of Elizabethtown. The Yellow-throated vireo was found at

Middle Saranac lake and Pollywog pond, and one was heard singing on the shore of Lake Placid. A family of Migrant shrikes was found near Long Lake and I notice an instance of its breeding in Essex county, on the Ausable river, recorded by Dr Merriam.

Seventeen species of wood warblers were found nesting in the region, but neither the Tennessee warbler which was found by Roosevelt and Minot in Franklin county, and by Merriam in the western Adirondacks, nor a single specimen of the Bay-breasted, Cape May or Wilson warbler, which we had hoped to secure, could be found. The Black-throated green, Black-throated blue, Myrtle, and Magnolia warblers, as well as the Oven-bird, were common and generally distributed. Slightly less common and less generally distributed were the Blackburnian, Canadian, Chestnut-sided, Mourning, and Black and White warblers and Redstart. Common in the swamps were the Water-thrush and Northern yellow-throat up to an altitude of 2750 feet. The Mourning warbler was commonest in the burnt tracts which were grown over with a tangle of weeds and bushes. Chestnut-sided and Canadian warblers seemed to prefer the slashings up to an altitude of 3000 feet. Nests of the Black and White warbler were found by Mr Achilles at Elk lake and we noted old birds feeding their young near the top of Indian head. The Blackpoll warbler was found nesting near the summit of Indian head by Mr Bradstreet and old birds were observed carrying food to their young on the Geological cobble, Bartlett ridge, Marcy trail 2500 feet, Colden trail, Elk lake road 2000 feet, and also near the summit of Skylight, Marcy, Haystack and Whiteface. The Parula warbler was found in full song at Boreas pond, Elk lake and the Upper Ausable, but the nest was not located. The Yellow warbler was seen only at Beede's near the head of Keene Valley.

The Catbird was found nesting at St Huberts and Boreas camp. The Brown thrasher was said to occur at Elk lake, but we saw no specimens. One family of House wrens was located at Elizabethtown. The Winter wren was generally distributed in the woods, and broods of young were frequently seen to an altitude of 3900 feet. The Brown creeper was about

as common as the Winter wren and broods of young were found at an altitude of 3500 feet. The Red-bellied nuthatch was abundant throughout the region. The White-bellied nuthatch was not found in Essex county, but was observed by Messrs Fuller and Taylor near Saranac Inn and Racquet lake. The Chickadee was common to an altitude of 3600 feet. Families of Hudsonian chickadees with young recently from the nest were found in the Upper Ausable swamp and near Skylight camp. The Golden-crowned kinglet was common from an altitude of 2000 to 4000 feet. A single Ruby-crowned kinglet was seen on the slope of Mt Marcy at an altitude of 4000 feet.

All species of the Thrush family, known to breed in the State, were found within 7 miles of Mt Marcy. Several pairs of Wood thrushes were breeding in the woods at the foot of the Upper Ausable lake, altitude 2000 feet, and two of their nests were found. The Wilson thrush was fairly common at St Huberts and Elk lake, and Mr Richard found them all the way from North Creek to Boreas River, but they were certainly not to be found in the woods about the Ausable lakes, or on any of the mountain slopes we visited which were above 2000 feet. In these localities they were replaced by the Bicknell thrush, which was found on the Geological cobble, altitude 3300 feet, on the Bartlett ridge, and along the Marcy trail, altitude 3100 feet, and along the Colden trail from Mt Marcy. Near Skylight camp at the foot of the Marcy slide a pair with young was found on July 12th. From the summit of Marcy at twilight several were heard singing in the scrubby spruce near the timber line. At Lake Colden, altitude 2750 feet, several males were singing about our camp on the morning of July 18th, and one male was taken. Both the Olive-backed and the Hermit thrushes were common and nesting to an altitude of 4300 feet. The Robin was fairly common, even in the forests about the Upper Ausable, and a few were noted at an altitude of 4000 feet. Bluebirds were nesting in Keene Valley, Clear pond, Proctors, and Boreas camp and a single specimen was heard as it flew over Skylight camp on July 12th.

It was evident from the search which we were able to make, that at least 100 species of birds were nesting within 10 miles of Mt Marcy. With the addition of those species which were seen on one or two occasions and those of which we learned from reliable sources, the number is raised to 117, and I have no doubt that this represents about the actual number of species nesting in that region. Of the 100 species which we found nesting, 32 are commonly regarded as belonging to the Canadian fauna, and the remainder are species of general distribution in eastern North America, or of the Alleghanian fauna. The typical Alleghanian species enter the valleys and clearings as far as St Huberts, Elk lake, and Boreas camp. No Carolinian species was found within 10 miles of Marcy, and no Hudsonian species unless the Bicknell thrush, Ruby-crowned kinglet and Hudsonian chickadee be regarded as belonging to that fauna.

INCREASE AND DECREASE OF SPECIES

It is the general testimony of authors that there has been a marked diminution in the bird life of our State during the past century, and there can be no doubt that this is true of the waterfowl, shore birds, and, in general, of the larger species. At the same time, since our wild birds are the property of the State and form a valuable public asset, it seems advisable to consider briefly the facts regarding their variation in abundance, and the causes which affect bird life in general.

When the State was first settled, waterfowl fairly swarmed on our bays, rivers and lakes, and shore birds flocked by thousands every spring and fall along Long Island and on the inland lakes. Wild turkeys, Ruffed grouse, and Bobwhites were well distributed, although the turkey and "quail" were never common in the northern districts. The larger hawks and owls were abundant throughout the State, while herons and other marsh birds occupied the swampy lakes and rivers. It is difficult to obtain reliable information in regard to the abundance of small birds, like the warblers, flycatchers, sparrows and thrushes, but the writer believes they were less abundant during colonial times than they are at present. This may

not be true of the Red-winged blackbird, Crow blackbird, the woodpeckers and many others, but the accounts given by early writers of the tremendous multitudes of "maize thieves," as the blackbirds were called, create a greater impression because the birds were concentrated about the few plantations, whereas now they are scattered over thousands of square miles which formerly were covered with forests.

The general law of variation in abundance seems to be as follows. Birds which prefer the open country begin to increase as the forests are cut off, and many which live in the forests themselves increase as long as the clearings are few and scattered. As the cultivation of the country progresses and a large percentage of the forests has been cut off, the hawks, owls, grouse, jays, Pileated and Hairy woodpeckers, tanagers and many wood-warblers and thrushes decrease in number. When the swamps are drained there are fewer nesting places for snipe, rails, bitterns and Marsh wrens. As the pasture and meadow lands increase in area, birds like the Bobolink, Meadowlark, Vesper sparrow, Killdeer and Bartramian sandpiper find favorable nesting places and increase.

But as the modern style of agriculture develops, new dangers arise to threaten the field birds. Late plowing and extensive cultivating and early mowing destroy great numbers of eggs and young birds. A high stage of agriculture is likewise accompanied with danger from the spraying of fruit trees and potato plants, as birds are often killed by eating caterpillars which have been poisoned. The cutting of all dead limbs and trees also destroys the nesting sites of flickers, Downy and Red-headed woodpeckers, chickadees, wrens and bluebirds. On many well kept farms, also, the barns are so tightly closed that swallows are unable to gain entrance. Thus in many ways the increase of native birds is discouraged, unless artificial means is taken to counteract the evil by such methods as erecting boxes and woodpecker stubs, cutting swallow-holes in the barn, cultivating and plowing around the nests, and watching out for the young birds when mowing.

In thickly settled districts the danger to many species is further increased by the abundance of telegraph and telephone wires, electric lights, plate-

glass windows, cats and thoughtless boys. Especially during the migration season many birds are killed in every city and village by flying against the plate glass where they see a reflection of the landscape. Thousands are also killed, or hopelessly maimed, by flying against wires which are strung along the streets and railroads; these wires being at the same hight as the ordinary flight of the Woodcock, Pheasant and many others, form deadly obstacles against which they break their necks. I have known many instances of such birds falling victims to the telegraph wire and the same is true of ducks and many of our smaller birds. I have also known of upward of a dozen small birds being killed in a single month by flying against the wire netting which formed the back-stop of a tennis court. In the case of wire and plate-glass victims, it is only a very small percentage which are noticed, but from the number which have come under my personal observation, it is easy to believe that many thousands are thus sacrificed annually in our State. If the disagreeable truth must be told, it is certain also that tens of thousands of birds yearly fall victims in our State to the domestic cat, while dogs kill a comparatively small number.

Along the coast many birds fly against lighthouses and towers while they are migrating at night. Sometimes several hundred birds are picked up in a single morning by the keepers. While migrating on the night of May 7th, 1905, a bushel basket full of warblers, sparrows, vireos and wrens consisting of 17 different species were killed by striking the Washington Monument. During the night of September 23, 1887, 356 Blackpoll warblers, among others, were killed by the Fire Island Light, on Long Island. On December 3d, 1888, 40 Scaup ducks were killed against the Montauk Light Tower; on December 17, 1890, 24; and on November 15, 1890, 13 struck. Against the Fire Island Light 59 of these ducks were killed on January 6th, 1888; on the 12th, 27; and on February 25th, 1894, 40 struck [*see*, Dutcher, Water Birds, ms no. 148]. Accounts of smaller numbers striking Long Island lighthouses, both of Scaup ducks and many other species of birds, are scattered through Mr Dutcher's Long Island Notes.

In addition to all these dangers to bird life we must add the direct agency of man in destroying birds and taking their eggs, both for food, scientific specimens, and for so called sport or idle curiosity. Perhaps the most destructive class are the thoughtless boys who go birds' egging and shooting indiscriminately; also foreigners, mostly Italians, who often kill all kinds of birds for food, as they have been accustomed to do in their native country; and the pot hunters and market gunners, who exterminate our game without mercy. It is also a common occurrence in all parts of the State to see gunners, who call themselves sportsmen, shooting at swifts, swallows, meadowlarks, kingbirds etc. merely "for fun," or "for practice." Mr Fuertes and myself once picked up 18 swallows which had been killed by a gunner who was returning home, disappointed, from a morning's duck shooting, and this was only a small portion of the number which he had shot as they were hovering over the reeds of the Cayuga marshes. Bitterns, grebes, owls and herons are killed by many gunners at every opportunity. It is probable that such acts are largely the result of thoughtlessness or ignorance, and it is to be hoped that by spreading a knowledge of our native birds, thereby arousing a pride and interest in their welfare, we may overcome a large portion of this wanton destructiveness.

We have not yet mentioned the dangers to which birds are subjected in the due course of nature without the interference of man. The most obvious of these arises from the attacks of predaceous animals. Gyrfalcons, Duck hawks, goshawks, Snowy and Great horned owls are destructive to ducks, grouse and other large birds. Pigeon, Cooper and Sharp-shinned hawks feed mostly upon sparrows, thrushes and other small birds. All the species of hawks and owls occasionally kill other birds, as is also true of shrikes, crows, jays and Crow blackbirds. The three last mentioned are especially destructive to eggs and young birds. I have known many instances of crows carrying away robins and other young birds when nearly ready to leave the nest and have seen Crow blackbirds follow and kill young robins which were able to fly several rods. I once saw a Bittern followed so hotly by a troop of redwings that she dropped the young bird

which she was carrying away to her nest, and on examining the victim I found it was a Red-winged blackbird fully fledged which the Bittern had speared through the side with her daggerlike beak. There is little doubt that the callow young of our perching birds are devoured by numerous flesh-eating species. The mortality among eggs is even greater than among the nestlings. Many species of otherwise inoffensive birds become egg-eaters during the nesting season. Blackbirds, cuckoos, catbirds and wrens invade their neighbors' nests and destroy their treasures. Crows and jays are probably the worst destroyers of eggs and nestlings and I have seen the Crow on so many occasions in this nefarious business that I doubt if I could ever consent to regard him as a reputable citizen. The Cowbird is fully as noisome a pestilence from the standpoint of bird protection, for every young Cowbird is reared at the expense of a whole brood of vireos, warblers, finches or some other song bird.

Among the fourfooted enemies, next after the cat, I should place the red squirrel. One summer while sojourning at a lakeside camp I saw a pair of red squirrels succeed in destroying every robin's, flicker's, vireo's and warbler's nest in the grove. Three pairs of robins in the vicinity of our camp had failed to raise any young up to the middle of August, when I witnessed the destruction of the last nest. The poor birds had evidently decided to try their fate high on the limb of an elm tree which stood in front of our cabin. One day I heard their battle cry and came upon the scene just in time to see the squirrel dislodged by the robin's fierce attack and fall a distance of 50 feet to the ground, but this did not discourage him sufficiently, for later in the day I saw him make a sudden dash up the limb and seize an egg in his mouth but drop it suddenly as if afraid of another attack. A pair of flickers had built their nest in a stump near the camp and the young were apparently nearly half grown before the squirrels discovered them, but the peculiar notes of the young birds attracted their attention and the squirrels after investigating the hole killed the young birds one by one, the last victim being so large that the squirrel could scarcely drag it from the nest, but he succeeded

and let it drop to the ground with a deep gash bit through the base of its skull.

Weasels are also a dangerous foe to birds. This fierce little pirate destroys a large number of those species which nest or roost upon the ground. Sometimes he attacks birds of large size. On one occasion I saw in the snow the marks of a desperate struggle which had taken place between a weasel and a cock grouse. The weasel had sprung upon him as he was sleeping on the hillside, and they had rolled and struggled down the hill together until the grouse, owing to the favoring slope, finally shook off his assailant by his powerful wing-strokes and left a large mouthful of hackle feathers in the snow as the price of liberty. Minks, martens and skunks are natural enemies to the birds, but are not as destructive as the weasel, unless we except the marten which is largely arboreal in habits and consequently wrecks many a dainty household which escapes terrestrial enemies.

Among our native reptiles the black snake is undoubtedly a dreaded enemy to birds, for it attacks their nests both in trees and on the ground; and the snapping turtle is destructive to ducklings, young rails, coots and bitterns. Like the snapping turtle some fishes, notably the pike, pickerel and bowfin often rise from the grassy shallows and drag down the young of ducks and marsh birds and even capture the agile Marsh wren as it trips along the grasses at the surface of the water. My friend, Mr Foster Parker, of Cayuga, informs me that Marsh wrens have decreased remarkably along the marshes of Seneca river since the bowfin, or "dog-fish," became abundant in those waters.

We must not forget the parasites, both external and internal, which prey upon birds and often destroy their life directly, especially young birds in the nest. I have noticed many instances in which phoebes, swallows, goldfinches and woodpeckers lost all or a part of their young through the attacks of lice which swarmed about their nests. Every species of bird has a louse which specially afflicts it. Ticks often fasten themselves on the heads of young grouse and gradually absorb their life. Many birds, like the Meadowlark, are the hosts of tapeworms and other abdominal parasites.

Wood ducks and other species of waterfowl are often found to have the muscles studded with the cysts of threadworms or tapeworms. While parasites may not kill fullgrown birds directly they often diminish their vitality to such an extent that they fall an easy prey to carnivorous animals or unfavorable weather conditions.

Of all the dangers which befall the feathered tribe, however, it is doubtless true that unfavorable conditions of weather, whether of wind or flood or snow or drought, destroy more birds directly than any of the agencies already mentioned. During migration time they are subject to the greatest mortality and are often driven to sea by storms and perish in the waves. At times of fog or heavy rain or tempest, they fly against lighthouses, wires and other objects. They even pitch headlong into lakes and rivers as they descend toward the earth during fogs and storms, failing to distinguish the surface of the water as they approach it, and their water-soaked plumage renders them unable to rise again. Mr William Brewster has observed such catastrophes on the lakes of Maine, and several accounts have come to my notice of the wholesale destruction of small birds in Oneida lake and other bodies of water in our own State. Dr T. S. Roberts has given an authentic account[1] of the tremendous catastrophe which befell the migrating longspurs in Minnesota during March 1905, when millions of these birds were killed by flying against trees, buildings, and the ice of lakes which they were unable to see on account of the heavy snowstorm which overtook them in their flight.

During long-continued rainy weather as well as heavy rainstorms there is high mortality among young birds and sometimes the old birds themselves are killed. Martins and swallows are often found dead about the barns and boxes which they inhabit after a continued cold rain in April or May. Five hummingbirds were brought to me on the 31st of May 1881, having been killed the previous day by a snowstorm which whitened the ground for a few hours of the morning. These of course were an insignificant percentage of the number which were thus killed in that vicinity.

[1]Auk, 24: 369-77.

Many accounts have been published of the wholesale destruction of English sparrows and other birds by heavy rains, when large basketfuls of these birds are sometimes gathered under the trees of city parks after the storm is past. It is a noticeable fact that cold or wet weather for two or three weeks when grouse chicks are young will leave the coverts with scanty coveys of birds when the shooting season begins, and similar principles apply to almost all our native birds.

During the months of June and July 1906, the rails, gallinules, bitterns, Swamp sparrows, Red-winged blackbirds and Marsh wrens were twice driven from their nests and their eggs destroyed by the high water which prevailed in the marshes of Ontario county as a result of the abundant rainfall. During the same season a great calamity befell the birds of Ontario county from a hailstorm which visited that locality killing both old and young birds or breaking up their nests. In the neighboring county of Yates, Messrs Burtch and Stone found many nests destroyed and noticed a Wilson thrush which had been killed while incubating her eggs. The calamity as represented by farmers in some parts of the county was undoubtedly overestimated, but I am satisfied that about 20 per cent of the nests were destroyed in a belt of country 16 miles in length by 4 in width.

It is now well known to sportsmen that bobwhites are winter killed by deep snows or continued sleet storms, as then they are unable to get the necessary food. The Bluebird was nearly extirpated in many districts by the cold wave and sleet storms of 1895 which swept over the eastern United States. For several years thereafter this bird was very scarce in most portions of the northeastern states, and only recovered its former numbers in 1901.

SUGGESTIONS TO BIRD STUDENTS

There are numberless good books on the birds of eastern North America, many of them profusely illustrated. The author has been asked many times to name the best book for the bird student. This task is too difficult, for the requirements of bird students are as varied as the number of books.

The book is not of so much importance as the attitude of the student. The author learned more from an old thumb worn, imperfect copy of "Ornithology," evidently compiled from the works of early writers, principally Wilson, than he has from any exhaustive treatises of recent publication. He knew the colored plates of DeKay's *Birds of New York* so well that the species therein depicted were recognized at the first meeting in the field. Many beginners, however, will find it convenient to carry a pocket handbook for reference on their field excursions. In preparing the present volume we have avoided exhaustive synopses and keys, having found by experience that most students pay little attention to them. We would direct all students in using this volume to study carefully the plates which have been arranged as far as possible to give a clear idea of the relative size and characteristics of related species. These, in connection with the descriptive text, should give a clear idea of the different orders, families and species of our avifauna. We believe that all beginners should learn as soon as possible to recognize the relationship of the birds which they wish to identify, rather than to rely entirely on size and color, as is too often the case; that is, when wishing to identify a duck, one can determine the species more quickly by glancing at plates of ducks, than by running through a lengthy key; and to identify successfully a small bird it is of far greater importance to note from its general structure and personality whether it is a sparrow or a warbler, as the case may be, than to fix the attention too exclusively on its colors. All students should become familiar with the characters of orders and families as soon as possible. In the descriptions, the beginner is directed particularly to certain parts which are printed in italics to give definite "earmarks" for identification.

Every bird student should keep a notebook, or better, two notebooks, one for use in the field, and one a journal with removable leaves, or a card system, in which a record of each species is kept in chronological order, and each species in its proper order according to the prevalent classification. Thus it will be possible to turn at once to any migration or breeding date, or observations on the life history of any species in any given year. The

following sheet from such a notebook will illustrate the plan advised, but of course in common species, like the Migrant shrike and Bluebird, the notes will be much more extensive and varied.

CAPE MAY WARBLER DENDROICA TIGRINA

1902

Rochester, N. Y., May 7. One reported seen.

do. May 12. Saw a fine male, the first I ever studied through a glass. He was low down among the bushes and brush in the farther corner of Cobb's hill, restlessly searching for insects. Could make out with perfect distinctness the reddish ear spot and large yellow patch behind it, the black crown, the large white patches in the wings and outer tail feathers, and the yellow under parts streaked with black.

1903

Rochester, N. Y., May 10. Found one male in Mt Hope.

do. May 12. Male on Cobb's hill.

1904

Charlotte, N. Y., May 8. In Greenleaf woods saw the only ♂ noted near Rochester this year.

1905

Rochester, N. Y., May 4. ♂ reported seen on Cobb's hill.

do. May 14. Saw ♂ in company with Bay-breasts in the oak tops on the Pinnacle.

1906

Springville, N. Y., May 12. Saw a fine ♂ on the east edge of Clark's woods in company with a Palm warbler and many others of several different species; they were all feeding restlessly in the maple tops and moving rapidly from tree to tree toward the north along the ridge. A beautiful warm May day, the wind strong, southwesterly.

Rochester, N. Y., May 13. ♂ seen in Mt Hope.

1907

Rochester, N. Y., May 14. Saw a ♂ on Cobb's hill.

do. May 16. Saw two ♂ and one ♀ on Cobb's hill.

do. May 17. ♀ on Cobb's hill in the tops of the tall chestnut trees. Added her to my collection, thereby verifying to a doubting friend the possibility of distinguishing with a glass the ♀ Cape May in the tree tops.

Rochester, N. Y., May 18. Three ♂ and two ♀ seen on Cobb's hill before breakfast.

Rochester, N. Y., May 24. ♀ feeding in the white oaks on the Pinnacle.

do. May 30. Two ♀ on Cobb's hill in the chestnuts and white oaks.

Forest Lawn, N. Y., May 30. ♀ feeding in the maples back of Mr Perkins's cottage.

Several other specimens, or the same ones above mentioned, were reported from Rochester as seen by different friends. This year has been unprecedented for the numbers of this species in this vicinity.

It is absolutely essential that some record of observations be kept. Migration dates, the relative abundance of different species, mating, nest building, first eggs seen, period of incubation, length of time young remain in nest, kind and amount of food brought to young, destruction of nests, special enemies, second broods, beginning and end of song period, time of day the song is heard, description of song and call notes, and many other valuable bits of life history would thus be gathered into such an adjustable notebook and in such order as to be of the greatest satisfaction to the owner as well as to any ornithologist seeking information on the birds of the locality.

The need of such records on the number of birds of each species which may be seen in a given locality is well illustrated by the answers given by 12 bird enthusiasts in Monroe county when asked to mark 50 of our commonest land birds as to their relative abundance, on a basis of counting the English sparrow 10. Estimates of the Bluebird's abundance varied from 1–9. Of the Chickadee from ½–6, of the Crow from 2–10, Phoebe from 1–7, Chimney swift, 1½–8, Flicker, ½–7, Barn swallow, ½–8, Least flycatcher, ⅕–6, Song sparrow, 5–10, while the estimates on the other 40 show equal discrepancies. This shows that general impressions are of little value from the standpoint of exact science, and that records of well determined facts form the only safe basis of judgment.

Many bird lovers wish to know how many species of birds it is possible to see in one day, or in an entire season. This depends of course on the

proficiency of the observer in recognizing birds at a glance, and his knowledge of their proper haunts and the time of their appearance, as well as his energy in the search and the amount of time at his disposal. After carefully reviewing the list of New York birds, I am convinced that any one well acquainted with the different species, who is willing to devote one day each week to field work, through the year, and four half days each week in April and May, can surely see a list of 114 species of land birds and about 50 water birds, with a possible additional list of 40 or 50 land birds and 15 or 20 water birds. This assumes of course that he is so situated that he can visit the proper haunts of the water birds as well as the forest-loving species

The largest daily lists are made along the slopes of river valleys, and near the coast or the lake shores where there is a convergence of migration routes.

An excellent way of recording the migrations, or of taking a bird census, is to form an association of workers who can divide the country between them each day, and meet at intervals to compare and record their observations. This method has been employed with success by the Bird Section of the Rochester Academy of Science in studying the spring migrations of 1902 to 1907, and by the Department of Vertebrate Zoology of Cornell University in 1905 and 1906. The result has been the assembling of exceptionally full and accurate migration dates for those stations [*see* Monroe county and Tompkins county, tables of migration]. Of great value, also, are the data of individual observers, who have recorded the migrations at the same station through a series of years, as has been done by Dr Merriam at Locust Grove, Dr Fisher at Ossining, and Dr Mearns at Highland Falls.

It is possible for a single observer to record as many as 100, or even 130 different species of birds in one day, provided his energy is unlimited, and he has made a careful preliminary survey of the ground, and there is means of rapid conveyance between forest and copse, meadow and stream, swamp and lake. But to do this, one must be familiar with their haunts and know all the birds so well that they can be recognized at long distance,

while such birds as the Sora, Gallinule, Bittern, Whip-poor-will and Screech owl may be recorded as heard only. Such a day will probably begin at peep of dawn in the familiar coverts near home; then with a hope born of promised success the hunt develops with wild enthusiasm through the forenoon; continues toward sunset with a grim determination; and ends at dusk in utter weariness. This method of observation will hardly commend itself to the ordinary bird student, and certainly lacks the poise which appeals to the sympathetic student of nature. A list of 40 or 50 species during migration time is a good morning's work.

The following lists represent the longest which have been received from New York observers:

OBSERVED BY E. H. EATON, AT ROCHESTER, N. Y.

May 4, 1905. Cobb's hill, Pinnacle, and Greenleaf woods. Cool and damp in the morning. East wind, but mostly clear and warmer in the afternoon.

Pied-billed grebe 1
Loon 1
Herring gull 20
Ring-billed gull 2
Bonaparte gull 2
Red-breasted merganser 20
Spotted sandpiper 2
Mourning dove 3
Sharp-shinned hawk 1
Red-tailed hawk 1
Broad-winged hawk 1
Kingfisher 2
Downy woodpecker 2
Red-headed woodpecker 1
Sapsucker 3
Flicker 8
Chimney swift 6
Whip-poor-will 1 ♀
Kingbird 4
Crested flycatcher 2
Phoebe 2
Alder flycatcher 1
Least flycatcher 1
Prairie horned lark 1
Crow 10
Cowbird 8
Red-winged blackbird 6
Meadowlark 3
Baltimore oriole 5
Bronzed grackle 12
Purple finch 6
Goldfinch 12
Vesper sparrow 10
Savanna sparrow 3
White-crowned sparrow 3
White-throated sparrow 100
Chipping sparrow 25
Field sparrow 6
Junco 3
Song sparrow 30
Swamp sparrow 3
Lincoln sparrow 1
Towhee 4
Rose-breasted grosbeak 1 ♂
Scarlet tanager 1 ♂
Barn swallow 5
Bank swallow 10
Tree swallow 2
Rough-winged swallow 2
Cedar waxwing 8
Migrant shrike 1
Warbling vireo 2
Yellow-throated vireo 2
Blue-headed vireo 4
Black and white warbler 25
Nashville warbler 10
Parula warbler 6
Yellow warbler 10
Black-throated green warbler 15
Black-throated blue warbler 18
Myrtle warbler 20

Magnolia warbler 8
Chestnut-sided warbler 15
Blackburnian warbler 20
Ovenbird 12
Water-thrush 3
Northern yellow-throat 5
Redstart 6
Catbird 1
Brown thrasher 4
House wren 2
Winter wren 1
White-breasted nuthatch 2
Red-breasted nuthatch 1
Brown creeper 5
Chickadee 2
Golden-crowned kinglet 1
Ruby-crowned kinglet 15
Wood thrush 4
Wilson thrush 6
Hermit thrush 12
Olive-backed thrush 1
Robin 40
Bluebird 6
English sparrow 30
Pheasant 2
(86 species)

BIRDS OBSERVED BETWEEN FREEVILLE AND ITHACA, N. Y., MAY 6, 1906

L. A. FUERTES, H. D. REED, A. H. WRIGHT, R. W. CURTIS

Barn swallow
Purple finch
Warbling vireo
Goldfinch
Yellow warbler
Robin
Meadowlark
Chipping sparrow
Cowbird
Oriole
Horned lark
Bluebird
English sparrow
Redwing
Crow
Song sparrow
Catbird
Scarlet tanager
Bobolink
Grasshopper sparrow
Savanna sparrow
White-crowned sparrow
Black-throated green warbler
Chimney swift
Sparrow hawk
House wren
Bronzed grackle
Least flycatcher
Phoebe
Kingbird
Spotted sandpiper
Yellow-throated vireo
Indigo bird
Cliff swallow
Northern yellow-throat
Red-tailed hawk
Solitary sandpiper
Rough-winged swallow
Killdeer
Flicker
Red-eyed vireo
Ruby-throated hummingbird
Field sparrow
White-breasted nuthatch
Crested flycatcher
Chestnut-sided warbler
Ovenbird
Wilson warbler
Canadian warbler
Black-throated blue warbler
Parula warbler
Ruffed grouse
Blackburnian warbler
Wilson warbler
Black and white warbler
Hairy woodpecker
Magnolia warbler
Wood pewee
Rose-breasted grosbeak
Blue jay
Redstart
Chickadee
Grassfinch
Kingfisher
Myrtle warbler
Tennessee warbler
Green heron
White-bellied swallow
Olive-backed thrush
Hermit thrush
Downy woodpecker
Louisiana water-thrush
Philadelphia vireo
(73 species)

In 1907 the great bird wave of early May was highly concentrated, but there was a poor showing of hawks and water birds at that time, most of them having passed on to the north, but it was possible to see a large

list of land birds, the warblers being specially abundant. The following list was observed May 16, 1907, at Rochester, N. Y., Cobb's hill, Float Bridge and Forest Lawn, by the author and four enthusiastic assistants.

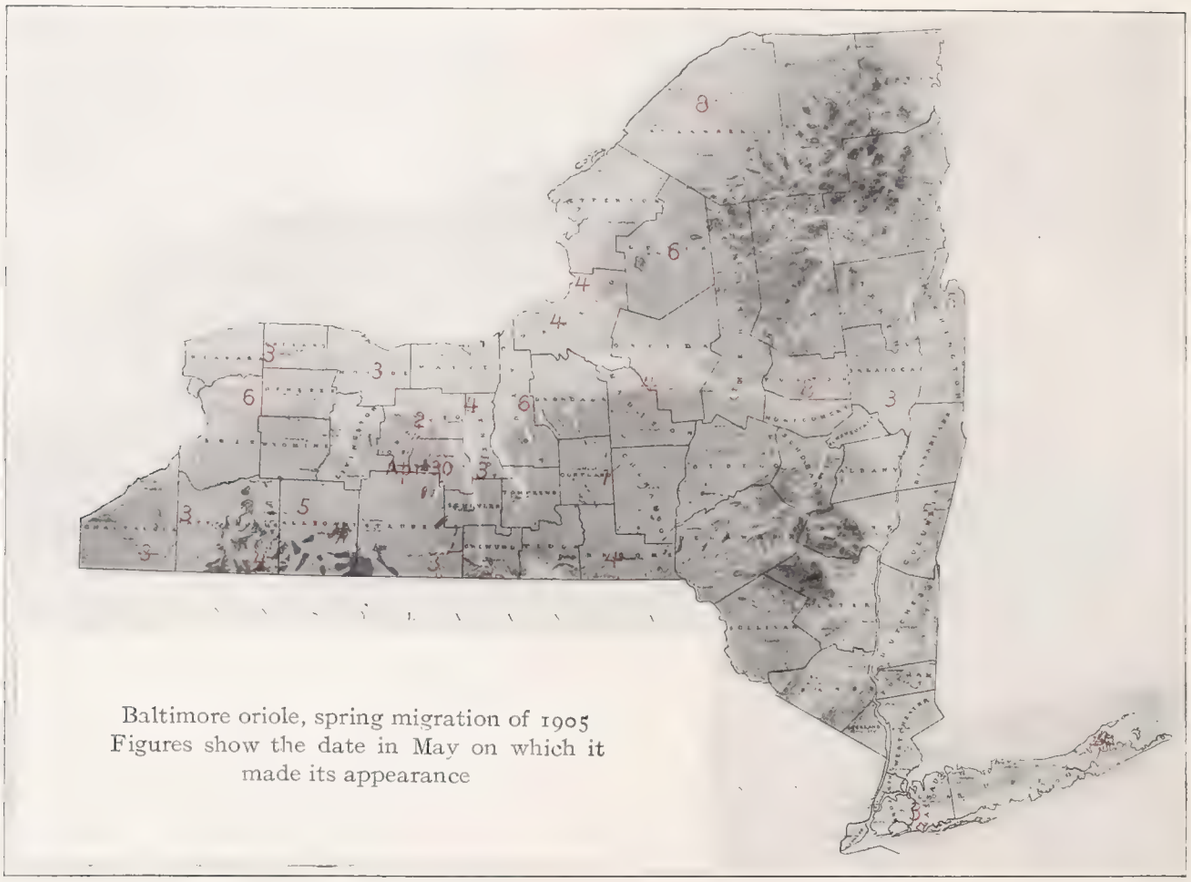
Pied-billed grebe 2
Loon 1
American bittern 4
Least bittern 1
Virginia rail 2
Carolina rail 4
Florida gallinule 2
Spotted sandpiper 5
Ring-necked pheasant 7
Mourning dove 2
Broad-winged hawk 1
Sharp-shinned hawk 1
Marsh hawk 1
Pigeon hawk 1
American sparrow hawk 2
Black-billed cuckoo 1
Belted kingfisher 6
Downy woodpecker 2
Yellow-bellied woodpecker 1
Red-headed woodpecker 2
Flicker 8
Night hawk 2
Chimney swift 20
Hummingbird 3
Kingbird 7
Crested flycatcher 2
Phoebe 1
Yellow-bellied flycatcher 1
Wood pewee 1
Alder flycatcher 2
Least flycatcher 3
Blue jay 2
Crow 17
Bobolink 1
Cowbird 18
Red-winged blackbird 25
Meadowlark 12
Baltimore oriole 19
Bronzed grackle 7
Purple finch 2
American goldfinch 26
Pine siskin 150
Vesper sparrow 15
Savanna sparrow 1
English sparrow 75
White-throated sparrow 50
White-crowned sparrow 2
Chipping sparrow 35
Field sparrow 4
Junco 1 ♀
Song sparrow 40
Lincoln sparrow 1
Swamp sparrow 6
Rose-breasted grosbeak 3
Scarlet tanager 2
Cliff swallow 3
Barn swallow 30
Tree swallow 2
Bank swallow 200
Rough-winged swallow 4
Cedar waxwing 12
Migrant shrike 1
Red-eyed vireo 2
Warbling vireo 3
Yellow-throated vireo 1
Blue-headed vireo 4
Black and white warbler 6
Nashville warbler 7
Parula warbler 10
Cape May warbler 2 ♂ 1 ♀
Yellow warbler 6
Black-throated blue warbler 12
Myrtle warbler 5
Black-poll warbler 1
Magnolia warbler 11
Chestnut-sided warbler 8
Bay-breasted warbler 2
Blackburnian warbler 3
Black-throated green warbler 8
Ovenbird 8
Water-thrush 1
Mourning warbler 1
Northern yellow-throat 2
Hooded warbler 1
Canadian warbler 5
Redstart 9
Catbird 11
Brown thrasher 6
House wren 1
Long-billed marsh wren 4
Brown creeper 1
White-breasted nuthatch 1
Red-breasted nuthatch 13
Ruby-crowned kinglet 3
Wood thrush 11
Wilson thrush 12
Olive-backed thrush 5
Hermit thrush 5
Robin 75
Bluebird 2

(100 species)

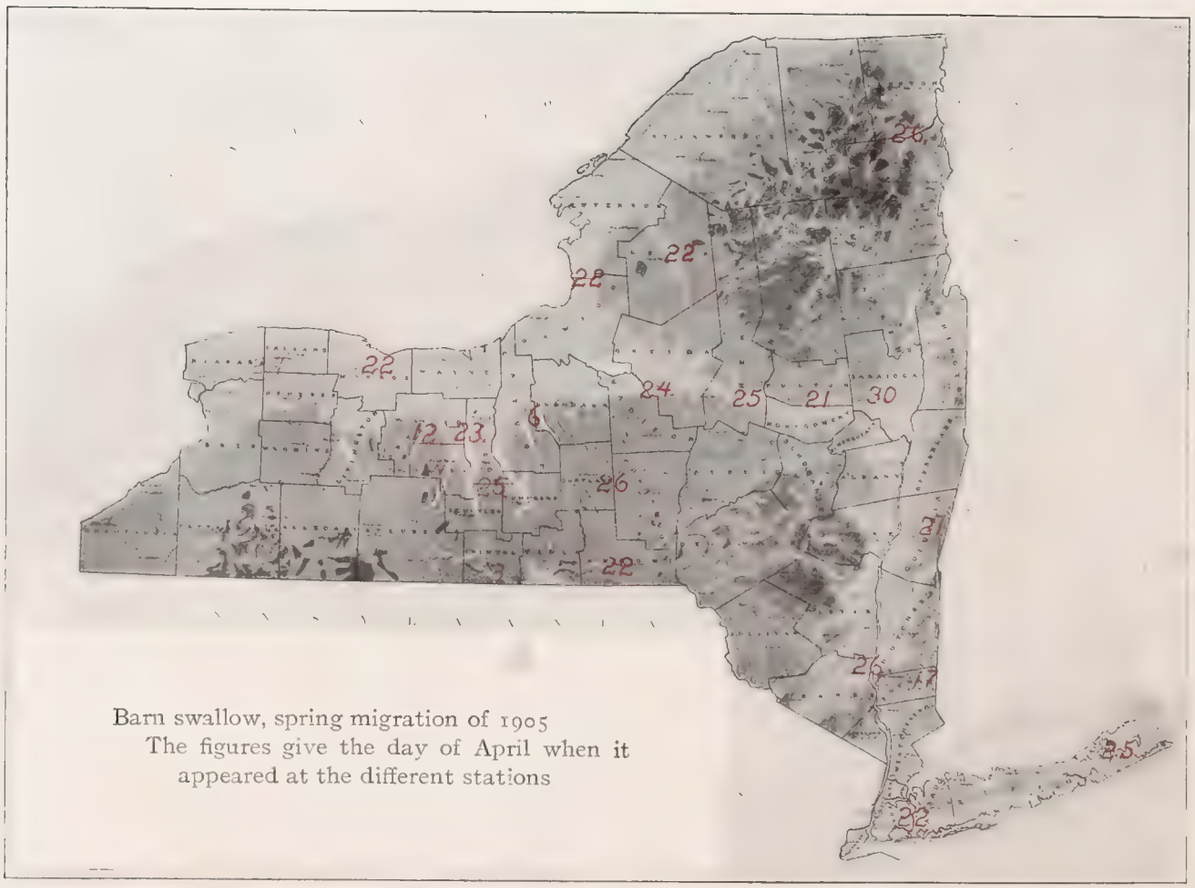
BIRD MIGRATION

Of all seasons, to a bird lover, the time of spring migration, perhaps, brings the deepest thrills of pleasure. There is a peculiar delight in hearing the first warble of the Bluebird as he descends from his homeward flight to the old familiar pear tree, or is first seen down the lane and by the pasture, "shifting his light load of song from post to post along the cheerless fence." The first cheery call of the Robin from the tree top by the house, awakens the blood to a new lease of life, and the plaintive lisp of the Meadowlark, the first *congaree* from the alder tops, and even the first metallic squeak of the Grackle from the spruce tree stirs at the roots of spring awakening. One after another the native birds appear, apparently overflowing with delight to reach their homes again. The copses and meadows ring with song. Many strange and beautiful birds are here also for a brief stay. The woods become alive with juncos, white-throats and warblers. Wherever one turns a new surprise awaits. Perhaps a Lincoln sparrow and a Cape May warbler, or a Philadelphia vireo; and the possibility of a Connecticut or a Kirtland warbler lures you on. It is time to be afield all day and see the sights and hear the songs.

But it is quite impossible to find every bird on the first day of its arrival, the country is so wide and the special haunts of each species are so scattered. One must visit the lake, or bay, to find the ducks and grebes and gulls. The "big woods" of hemlock, beech and maple will furnish different birds from those of the swampy second growth. Along the brook and across the pasture we meet a few which are not found in the meadow, or on the lake shore. On the bushy hillside we add the Chewink, Thrasher and Field sparrow; in the shady glen, the Louisiana water-thrush; and near the box-crowned pole in the garden the first martins. If not at the "float bridge," or the marsh every day, you miss the first note of the Sora, Gallinule, Bittern, or Marsh wren. And so each day and through all the day after the common birds have been found, it becomes



Baltimore oriole, spring migration of 1905
Figures show the date in May on which it made its appearance



Barn swallow, spring migration of 1905
The figures give the day of April when it appeared at the different stations

more and more difficult to add a new bird to the list. The observer must be ubiquitous in migration time.

The time of arrival is several days earlier in the southern part of the the State and in the lower altitudes than it is in the Adirondack district and the Alleghany plateau. The variation in the time of arrival, both at different stations in the State, and in different years at the same station, is greatest in the case of those birds which arrive during February, March and early April, the difference being sometimes three or four weeks. Birds like the Bobolink and Baltimore oriole, which come early in May, arrive at nearly the same date in all parts of the State [*see* map, p. 66], and their time of appearance varies only a few days at each station. Sometimes an unusually warm wave, early in the season, will bring bluebirds and redwings on the same date to nearly every station in the middle districts. This was the case on the 24th of February 1906, when these birds appeared in considerable numbers at Ithaca, Canandaigua, Rochester and other places. These facts seem to indicate that our birds can travel the whole width of the State in a single day during the migration if weather conditions are favorable, but a study of the tables following page 74 will show that the average date of arrival is several days later for the more northern and the more elevated districts.

There can be no doubt that the arrival of birds with us depends upon the temperature and probably upon the winds. With the advance of a low cyclonic center from the southwest, bringing high temperature to western New York in March, April or May, there is sure to be a bird wave which corresponds in magnitude to the warm weather wave which undoubtedly brought it. Many facts seem to show that the birds of western and northern New York are mostly immigrants from the southwest, and the warm weather as well as the prevailing winds of this region also come from that direction. The warm weather at least furnishes the favorable conditions which induce them to migrate. These are no more an agreeable temperature than an abundance of food and favoring winds to aid their arduous passage.

The sequence of species is nearly the same each season. The Bluebird, Robin, Song sparrow and Redwing are among the earliest arrivals. Late in March, or early in April, the Phoebe, Kingfisher, Purple finch and Vesper sparrow; by the third week in April, the Martin, Barn swallow and Spotted sandpiper are probably here. Early in May comes the great wave bringing the Oriole, Bobolink, Catbird, Kingbird and all the warblers, flycatchers and vireos, the latest among which will probably be the Wood pewee and the Mourning and Black-poll warblers. The males of each species usually precede the females by several days, as is noticeable in the case of the Oriole, Sapsucker, Bobolink and Red-winged blackbird. Some have supposed that the first individuals of each species to arrive are those which are destined to travel farthest north. This may be true in the case of some species, but in most cases the first to arrive are the individuals whose home is at the station, while the last of all to arrive are those going farthest north. In the vicinity of Rochester it is a common thing to see robins, Blue jays and Red-tailed hawks migrating along the shores of Lake Ontario, evidently en route for the far north at a time when individuals of the same species at Rochester have nests and eggs and sometimes young.

During migration birds follow, to some extent, the seashore, lake shore and river valleys, as natural highways of travel. The principal routes across New York State are along the coast, and up the Hudson-Champlain valley, and along the shores of Lake Erie and Lake Ontario. Lesser ones enter the State up the Delaware, Susquehanna and Alleghany valleys. These routes are based chiefly on three classes of observations. The most obvious of these is the direction taken by day migrants which are seen to pass in considerable numbers over the country in the courses indicated. The writer has frequently seen dozens of hawks, hundreds of swallows, and thousands of blackbirds during the spring migration passing along the southern shore of Lake Ontario in the course of a single hour, all traveling toward the east. Ducks and blackbirds are especially prone to follow the river courses and their movements point out the passage from one valley to the next. Great caution must be used, however, not to confuse

the daily movements of these birds to and from their feeding grounds with their migratory movement.

Another indication of the trend of a bird route is the abundance of species and individuals in the country traversed, and when sufficient data are at hand is as infallible a guide as the flights of day migrants. There is abundant evidence to show that birds are far more numerous during both the spring and fall migration along the coast, in the Hudson valley and along the southern shore of Lake Ontario, than they are on the highlands in western and eastern New York.

A third and very important guide to these bird routes is the distribution of species which are not found in every portion of the State. For instance there can be little doubt that the Cerulean warblers which breed in western New York enter that region from the west, or southwest, where that species is found both in the breeding and migration seasons. The same is true of the Migrant shrike and Prairie horned lark which originally invaded New York from the west and still each season return on their migrations along the route which was slowly established by their ancestors. The Orchard oriole, Grasshopper sparrow, and Louisiana water-thrush, which are common in the vicinity of New York city and are also found as far north as Lake George but are not common in the Mohawk valley, undoubtedly travel by the Hudson valley route in their yearly migrations, as is also true of many other species. The Yellow-breasted chat, which is rare in the vicinity of Lake Erie, Lake Ontario and the Mohawk valley, but is fairly common near Binghamton, Elmira, and the southern ends of the Finger Lakes, undoubtedly finds its way up the Delaware and Susquehanna valleys, as does the Kentucky warbler which breeds as far north as Cincinnatus, and the Carolina wren which has bred at Ithaca. There is no doubt that the Adirondack birds arrive both by the Hudson and the Ontario routes; those of the western and northern portions coming by way of the southern shore of Lake Ontario, where all the species common in the western Adirondacks are abundant in migration time, while those of the eastern Adirondacks come by way of the Hudson valley.

While many species of birds can undoubtedly travel the whole width of this State in a single day, there is every reason to believe that most of them journey by easy stages, often stopping to feed and rest by the way. During the migration season individuals of different species are often seen about the same spot for several days before they continue their journey. The writer has noticed this occurrence in the case of the Fox sparrow, Lincoln sparrow, Hermit thrush, Northern water-thrush, Solitary sandpiper and many other species, when single individuals or small companies could be found for a week or more at certain chosen spots under circumstances which proved beyond doubt that the same birds were seen each day. A further development of the warm weather which brought them or the arrival of a fresh low center with southwest breeze was usually the signal for their departure. But there is no definite means of determining how long the next stage of a bird's journey may be. Professor Cooke has shown that the average advance of such birds as the Oriole as a species is little more than 25 miles per day, but it may often be that the last flight of an individual, and even its average flight while migrating, is considerably greater. Most species of our common birds fly at the rate of 30 to 40 miles per hour, and many like pigeons, ducks, plover and snipe at the rate of 50 to 70 miles per hour, and when under way they undoubtedly proceed for several hours without rest.

Many of the smaller, more timid birds, migrate by night. This is especially true of species which live habitually under cover of woods and thickets, like thrushes, warblers, vireos, wrens, rails and sparrows. Their calls are often heard as they are passing overhead and they may be seen by looking through a telescope or field glass focused on the moon as they cross in front of its bright surface. Rains, or high head winds, cause them to descend and so the country where they are overtaken by the storm will be filled with fresh arrivals in the morning. The Woodcock and Whip-poor-will, which are largely nocturnal in habits, perform the migratory flight entirely at night. Species like the hawks, blackbirds, swallows, bluebirds and robins which are accustomed to wide flights across the open

country, migrate largely by day, and are often seen as they pursue their way at a moderate elevation. Even the thrushes and warblers are occasionally found to migrate by day, passing from one grove or orchard to the next in their route. At such times they fly near to the ground, but when they migrate by night they fly high above the tree tops, usually at an altitude of several hundred feet, and sometimes thousands of feet above the earth.

The instinct to move about in search of a favorable food supply is common to all species of birds, even the most sedentary, like the Canada grouse and Banded-backed woodpecker, which wander about within the limits of the spruce forest to a considerable extent. Others, like the Black-backed woodpecker, venture still farther and have been taken in all parts of the State. In some species, like the common Crow and the Robin, there is merely a withdrawal from the northern portion of their breeding grounds while as species they are resident in the warmer portions of their range. Thus it would be possible to mention all degrees of the migratory habit up to the most extreme, represented by such birds as the Whistling plover which breeds on the islands and shores of the Arctic ocean and passes the winter as far south as the valley of the Paraná and the plains of Patagonia, merely visiting us for a few days on its semiannual journey of 8000 miles.

There can be no doubt that the failure of the food supply and the desire to live in an even temperature are factors which enter into the solution of the problem of bird migration. Winter drives the birds south and like so many chickens which have been chased from a forbidden garden they come flocking back again as soon as winter has withdrawn. For in the wide northern lands which springtime opens up, with their wealth of food and shelter and safe retreat for rearing their young, the birds have ample reason to return to the spot of their nativity. Undoubtedly the glacial period had much to do with accentuating the yearly effect of the seasons and stamping in the racial instinct of migration, so that at the present day it is an impulse which must be obeyed, in many instances, even before the food supply fails; for those which wait too late may be destroyed before the winter

haven is reached. The manner and cause of bird migration has furnished food for speculation to countless observers since the earliest times and is a never failing source of fascination to the bird student.

SPRING ARRIVALS

Of the 100 and more observers in different parts of New York who have reported the migrations only four or five sent schedules of any extent on the fall migrations, and the notes on the spring movement in many cases are fragmentary, and very few have reported more than the commonest species of birds. The incomplete nature of these reports even in localities from which the records are most desired has rendered it extremely difficult to map the advance of species and trace their migration routes. Selecting 20 of our migratory birds which are most universally reported, and 32 of the observers who sent the longest schedules, I find the Robin was reported by 31 observers, the Bluebird and Baltimore oriole by 30, the Phoebe by 27, the Chimney swift by 26, the Kingbird by 25, the Flicker, Barn swallow and Catbird by 24, the Chipping sparrow, Bobolink, Yellow warbler and Song sparrow by 23, the Red-winged blackbird and Crow blackbird by 21, the Cowbird and Crested flycatcher by 20, the Hummingbird by 18, the Brown thrasher by 17, the Spotted sandpiper by 16.

The migration dates of all species will be found in the county schedules as explained under that heading, but for purposes of comparison, we have selected the dates of first appearance in different years at stations in widely separated parts of the State. For these comparative tables 90 of the commoner migratory birds which are most generally reported have been selected. Many interesting results will follow a careful study of the tables. Some stations situated near together were taken to show how at variance reports from such places may be, and I have found that two observers at the same station often record the same species at dates several days apart, which is undoubtedly due to the fact that one observer succeeded in catching the first migrant on the day of its actual arrival, or was fortunate enough to visit its proper haunts.

It often happens that a species is reported on a given date far to the north of stations where it has not yet been observed. This also indicates that the species is not always reported on the first day of its arrival, and the most reliable reports result from the combined observation of several observers who divide the country between them.

In comparing the average dates of 40 species for the years 1880, 1882 and 1883 at Ossining, Springville and Locust Grove, we find 25 earliest at Ossining, 14 at Springville, and 1 (the Hermit thrush) at Locust Grove. At Locust Grove 30 appeared latest, at Springville 7, and at Ossining 3. The grand average of these 40 species was two and one fourth days earlier at Ossining than at Springville, and four and two thirds days earlier than at Locust Grove. This average probably indicates correctly the general progress of migration in the State, but the difference in the time of arrival will usually be much greater in the case of the early migrants than those which come during the warm waves of early May.

The birds at Springville, and of western New York in general, come mostly by way of the Mississippi valley or the western slope of the Alleghany plateau, and as migration in the interior is earlier than along the coast of the United States in our latitude, it is evident that those species which are earliest at Springville are migrants from the interior. Some species, however, which surely come to western New York by way of the interior, are later than at Ossining, as in the case of the Palm warbler. This, however, is a different geographic race from the Yellow palm warbler which is found at Ossining, and its chief migration route is far to the west of New York. Thus the Palm warblers which reach New York are out of their proper course and might be expected to be late.

The observers who made these migration records are as follows:

Staten Island	William P. Heineken
Long Island City	W. F. Hendrickson
Shelter Island	W. W. Worthington
Newburgh	F. B. Robinson
Carmel	W. A. Mead
Stanfordville	Mary Hyatt
Ballston Spa	S. R. Ingersoll

Gloversville	Charles P. Alexander
Elmira	Rufus Stanley, Stella M. Lawrence, Fannie B. Rice
Corning	Mr and Mrs George B. Hollister
Binghamton	W. N. Clute, Lillian Hyde, John A. Dyer
Cincinnatus	H. C. Higgins
Alfred	F. S. Place, A. C. Whitford
Ithaca	The Department of Vertebrate Zoology, Cornell University, (especially, Dr H. D. Reed, L. A. Fuertes, A. H. Wright, A. A. Allen, A. C. Weed, Francis Harper)
Branchport	Verdi Burtch, Clarence F. Stone
Erie, Pa.	W. E. C. Todd, W. W. Worthington
Jamestown	Mrs R. R. Rogers, L. T. Sprague
Lockport	J. L. Davison
Rochester	The Bird Section of the Rochester Academy of Science (40 members, E. H. Eaton, *Chairman;* W. L. Dobbin, *Secretary*)
Canandaigua	A. P. Wilbur, Ernest Watts, F. T. Antes, Maurice Blake, E. H. Eaton
Geneva	F. H. Hall, W. P. Wheeler
Penn Yan	Verdi Burtch
Auburn	F. J. Stupp jr, Matilda Jacobs
Lowville	James H. Miller
Ossining	Dr A. K. Fisher
Springville	E. H. Eaton
Locust Grove	Dr C. Hart Merriam

90 TRANSIENTS COMMONLY REPORTED	STATEN ISLAND	LONG ISLAND CITY	SHELTER ISLAND	NEWBURGH		CARMEL			STANFORDVILLE							
	1900	1900	1896	1900	1905	1900	1905	1906	1900	1905	Earliest	20 yrs average	1889	1890	1891	18
Horned grebe						Apr. 8										
Pied-billed grebe						Apr. 10										
Canada goose		Mar. 16				Mar. 30		Mar. 31								
American bittern	Apr. 13	Apr. 23		May 1		Apr. 4										
Great blue heron		May 6				Mar. 30		Apr. 6								
Green heron	Apr. 28	May 3	May 17			May 13		May 21	May 20		Apr. 30	May 27	May 29	May 7		
Sora																
American woodcock						Mar. 30	Mar. 20	Apr. 5		Mar. 25	Mar. 25	Apr. 17				
Wilson snipe		Apr. 4	Apr. 13		May 8	Apr. 16	Apr. 25									
Greater yellow-legs		Apr. 28	Apr. 17													
Solitary sandpiper		May 7	May 12			May 7										
Spotted sandpiper	May 9	Apr. 27	Apr. 23			Apr. 26	Apr. 24	Apr. 20	Apr. 23	May 15	Apr. 21	May 5	May 2	May 7		May
Killdeer		Mar. 19				Mar. 23								May 2		May
Mourning dove		Mar. 27	Mar. 24			Apr. 1	Apr. 8	Apr. 21					Apr. 8	Apr. 14	Apr. 18	Apr
Marsh hawk																
Sparrow hawk				Apr. 6		Mar. 20										
Osprey	Apr. 16	Mar. 26	Mar. 30		Apr. 9		Apr. 10	Apr. 15								
Black-billed cuckoo	May 19		May 20		May 12	May 13	May 3						May 18	May 12	May 4	May
Belted kingfisher	Apr. 1	Apr. 4		Apr. 29	Apr. 1	Res.			Apr. 19				Apr. 28	Apr. 14	Apr. 14	Apr
Yellow-bellied sapsucker	Apr. 5			May 15		Apr. 30								Apr. 14	Apr. 14	Apr
Red-headed woodpecker				May 2												
Northern flicker	Mar. 5	Mar. 19		Apr. 24	Mar. 13	Apr. 9	Mar. 20	Apr. 11	Apr. 12	Mar. 29	Mar. 19	Apr. 13	Apr. 13	Apr. 9	Apr. 15	Apr
Whip-poor-will				Apr. 29	May 7	Apr. 30	May 8	May 5	Apr. 29				May 10			
Nighthawk			May 18	May 14	May 7	Apr. 30	May 6		Apr. 28	May 15	May 7	May 17	May 14	May 15	May 14	May
Chimney swift	May 2	Apr. 22	May 2	Apr. 30	Apr. 21	Apr. 24	Apr. 21	Apr. 26	Apr. 28	Apr. 26	Apr. 24	Apr. 30	Apr. 21	Apr. 30	Apr. 21	May
Ruby-throated humming bird			May 22	May 17	May 21	May 20	May 7	May 21	May 8	May 8	May 5	May 11	May 23	May 11	May 10	May
Kingbird	May 1	May 8	May 9		May 9	Apr. 29	May 3	Apr. 30	May 2	May 3	May 1	May 9	May 9	May 2	May 7	May
Crested flycatcher	May 13		May 1		May 20	May 7	May 11	May 26	May 18	May 11	May 4	May 9	May 9	May 5	May 10	May
Phoebe	Mar. 28	Mar. 27	Apr. 15		Mar. 25	Apr. 1	Mar. 19	Apr. 4	Mar. 23	Mar. 19	Mar. 14	Mar. 24	Apr. 1	Apr. 3	Apr. 9	Apr
Wood pewee	May 18	May 13	May 16		May 16	May 13	May 16	May 16	May 13	May 12	May 12	May 20	May 18	May 17	May 22	May
Least flycatcher	Apr. 29		May 4		May 6	Apr. 30	Apr. 28	Apr. 30	May 8	May 12	May 2	May 5		May 5		May
Bobolink			May 5		May 8	Apr. 30	Apr. 25	May 1	May 26	May 15			May 8	May 7	May 8	May
Cowbird	Mar. 21	Apr. 3	Mar. 20			Apr. 4	Mar. 23	Apr. 4	Apr. 3	Mar. 23	Mar. 7	Mar. 23	Apr. 6	Mar. 26	Mar. 27	Mar
Red-winged blackbird	Mar. 21	Mar. 12	Feb. 15		Mar. 25	Mar. 24	Mar. 16	Mar. 28	Apr. 3	Apr. 27	Mar. 15	Apr. 5	Apr. 13	Mar. 20	Apr. 1	Apr
Meadowlark					Mar. 13				Apr. 18	Apr. 27	Mar 25	Apr. 18	Apr. 8	Apr. 2	Mar. 24	Apr
Baltimore oriole	Apr. 30	May 3	May 4	May 7	May 3	May 8	May 3	May 4	May 3	May 4	May 3	May 5	May 7	May 5	May 10	May
Rusty blackbird		Mar. 19	Mar. 31			Apr. 1	Mar. 17	Apr. 6		Mar. 18	Mar. 9	Mar. 15				
Crow blackbird	Mar. 14	Mar. 17	Mar. 8		Mar. 25	Mar. 23	Mar. 23	Mar. 11					Apr. 3	Apr. 1	Mar. 25	Apr
Purple finch	Mar. 14		Apr. 23		Apr. 16	Apr. 17	Apr. 14	Apr. 4	Apr. 15	Apr. 25	Jan. 26	Apr. 12	Apr. 21	Apr. 29	Apr. 14	
Vesper sparrow			Apr. 10		Mar. 20	Apr. 2	Mar. 20	Apr. 4	Apr. 15	Apr. 4	Mar. 24	Apr. 8	Apr. 8	Apr. 19	Apr. 14	Apr
Savannah sparrow		Apr. 9			Apr. 2											
White-crowned sparrow					May 5	May 2				May 8		May 13	May 9	May 4		Apr
White-throated sparrow	Mar. 2	wv.	Apr. 23		Apr. 26	Apr. 29		Apr. 29	Apr. 29	Apr. 14	Mar. 20	Apr. 25	Apr. 28	May 4	Apr. 28	Apr
Chipping sparrow	Mar. 28	Apr. 14	Apr. 14	Apr. 5	Mar. 20	Apr. 19	Apr. 14	Apr. 14	Apr. 19	Mar. 30	Mar. 30	Apr. 15	Apr. 12	Apr. 7	Apr. 14	Apr
Field sparrow	Apr. 1	Apr. 7	Apr. 13		Apr. 2	Apr. 20	Mar. 31	Apr. 5	Apr. 14	Mar. 27	Mar. 18	Apr. 2	Apr. 28	Apr. 29	Apr. 29	Apr
Song sparrow	Res.		Mar. 24		Mar. 11	Res.			Mar. 23	Mar. 18	Feb. 26	Mar. 15		Mar. 7	Mar. 25	Mar
Fox sparrow	Mar. 9	Mar. 19	Apr. 10		Apr. 19	Mar. 23	Mar. 23	Mar. 17	Apr. 2							
Towhee	Mar. 28	Apr. 30	Apr. 21		Mar. 25	Apr. 30	Apr. 26	Apr. 20	Apr. 16	Apr. 26	Apr. 16	Apr. 28				
Rose-breasted grosbeak	May 6			May 6	May 8	May 9	May 6	May 7	May 10	May 6	May 5	May 11	May 12	May 29		May
Indigo bird	May 25			May 8	May 8	May 9	May 15	May 26	May 14	May 15	Apr. 28	May 14	May 14	May 13	May 10	May
Scarlet tanager		May 7	May 14	May 10	May 7	May 9	May 6	May 9	May 8	May 15	May 8	May 10	May 8	May 29	May 18	
Purple martin	May 21		Apr. 26	May 11		May 23									May 18	
Cliff swallow				May 3	Apr. 26	May 1	May 1						May 6	May 10	May 6	May
Barn swallow	Apr. 18	Apr. 22	Apr. 15	May 6	Apr. 26	Apr. 17	Apr. 17	Apr. 16	Apr. 23	May 12	Apr. 23	May 4	Apr. 21	Apr. 22	Apr. 14	Apr
Tree swallow		Apr. 11	Mar. 31		Apr. 21	Apr. 9	Apr. 17						Apr. 21	Apr. 29	Apr. 16	May
Bank swallow				May 6		Apr. 30	Apr. 15	Apr. 16								
Red-eyed vireo	May 18		May 14	May 6	May 8	May 2	May 7	May 2	May 13	May 12	May 7	May 12		May 25		May
Warbling vireo				May 6	May 4				May 14	May 6	Apr. 29	May 6			May 1	May
Yellow-throated vireo				May 14	May 3	May 7	May 3	May 4	May 3	May 12	May 1	May 9				May
Black and white warbler	Apr. 25		Apr. 22	May 6	May 9	Apr. 25	Apr. 28	Apr. 29	May 3	Apr. 27	Apr. 19	Apr. 27			May 4	May
Nashville warbler			May 4			May 6	May 4	May 10								
Parula warbler			Apr. 24			May 12	May 15	May 12	May 3	May 7	May 1	May 9				
Yellow warbler	Apr. 28	May 3	Apr. 30		May 7	May 2	May 2	Apr. 30	May 2	May 3	Apr. 29	May 3	May 9	May 5	May 1	May
Black-throated blue warbler	Apr. 24					May 9	May 10	May 10	May 10					May 7	May 10	May
Myrtle warbler	Apr. 22	Apr. 30			aMay 5	Apr. 24	Apr. 21	Apr. 25	May 3	Apr. 26	Apr. 26	Apr. 30				
Magnolia warbler		May 12	May 15	May 23	May 22	May 9	May 7	May 14	May 17	May 18	May 3	May 13	May 12	May 10	May 4	May
Chestnut-sided warbler		May 7	May 4		May 9	May 9	May 10	May 10	May 20	May 18	May 12	May 16	May 13		May 10	May
Bay-breasted warbler				May 20	May 22	May 9	May 15									
Black-poll warbler	May 25		May 15	May 20		May 20	May 17	May 17								
Blackburnian warbler			May 22		May 9	May 9	May 10	May 11		May 15	May 12	May 14			May 12	May
Black-throated green warbler		May 12	Apr. 22	May 12	May 9	May 9	Apr. 29	Apr. 29	May 8						May 9	May
Palm warbler						Apr. 16	Apr. 21	Apr. 20								
Ovenbird	Apr. 25	May 3	Apr. 28		May 8	May 2	May 3	May 4	May 9	May 6	May 3	May 8		May 10	May 22	
Water-thrush						Apr. 24				Apr. 25	Apr. 25	May 1				
Mourning warbler				May 10			May 14									
Northern yellow-throat	May 24		May 9		May 9	May 9	May 5	May 5	May 9	May 5	May 5	May 9	May 14	May 3		
Canadian warbler	May 20	May 13			May 10	May 9	May 13	May 10	May 10	May 22	May 12	May 19				
American redstart		Apr. 23	May 2		May 8	May 2	May 4	May 5	Apr. 30	May 6	Apr. 30	May 7	May 17	May 19	May 10	May
American pipit																
Catbird	Apr. 30	May 29	Apr. 30		May 7	May 3	May 3	May 4	May 6	May 3	May 1	May 7	May 12	May 10	May 19	May
Brown thrasher	Apr. 21	Apr. 28	Apr. 21		Apr. 28	Apr. 30	Apr. 20	Apr. 21	May 1	Apr. 21	Apr. 19	Apr. 30	May 2	Apr. 28	May 7	
House wren		May 5		Apr. 29	Apr. 22	Apr. 30	Apr. 23	Apr. 25	May 3	May 3	Apr. 18	May 1				
Winter wren	Mar. 20															
Ruby-crowned knight		May 12	Apr. 23	Apr. 29	Apr. 22				Apr. 19	Apr. 14	Apr. 5	Apr. 16				
Wood thrush	Apr. 27		May 4		May 5	Apr. 30	May 2	May 4	May 9	May 7	May 3	May 7	May 12	Apr. 22		May
Wilson thrush	May 12		May 16		May 8	Apr. 30	May 8	Apr. 19	May 12	May 5	May 4	May 7				
Olive-backed thrush																
Hermit thrush		Apr. 2		May 2	Mar. 25											
American robin	Mar. 3	Mar. 13	Mar. 20		aMar. 13	Mar. 4	Mar. 14	Feb. 23	Mar. 10	Mar. 14	Feb. 24	Mar. 9		Mar. 13	Mar. 20	Mar
Bluebird	Mar. 14	Mar. 12			aMar. 12	Feb. 22	Mar. 9	Feb. 21	Feb. 16	Mar. 10	Feb. 14	Mar. 1		Mar. 4	Mar. 12	Mar

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	BALLSTON SPA									GLOVERSVILLE		ELMIRA		CORNING		BINGHAMTON			CINCINNATUS
3	1894	1896	1897	1898	1899	1900	1904	1905	1906	1905	1906	1900	1905	1905	1906	1900	1905	1906	1900
..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Feb. 27	.....	.....	.....	.....	.....	.....	.....	.....
..	.....	.....	.....	.....	.....	.....	.....	.....	.....	May 7	.....	.....	.....	.....	.....	.....	.....	.....	.....
..	.....	.....	.....	.....	.....	.....	.....	.....	.....	May 6	Apr. 13	.....	.....	.....	.....	May 8	May 27	.....	.....
..	May 10	May 9	.....	.....	.....	.....	May 8	.....	.....	Apr. 28	May 19	.....	.....	.....	May 8	May 7	May 12	.....	.....
..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
..	.....	.....	.....	.....	.....	.....	.....	.....	.....	Mar. 29	Apr. 14	.....	.....	.....	May 14	.....	.....	.....	.....
..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Apr. 14	.....	.....	.....	.....	.....	Apr. 20	Apr. 21	.....
..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	May 5	.....	.....	.....	.....	May 6	May 2	May 4	May 14
14	Apr. 30	.....	.....	.....	May 14	May 13	May 8	.....	.....	.....	May 5	.....	.....	.....	.....	Apr. 23	May 11	.....	Apr. 25
22	.....	.....	.....	.....	Apr. 12	.....	.....	.....	.....	Mar. 29	Apr. 3	.....	.....	.....	.....	.....	.....	.....	.....
27	Apr. 15	.....	.....	Apr. 2	.....	.....	Apr. 15	Mar. 29	Apr. 7	May 8	May 5	.....	.....	.....	Apr. 22	Apr. 7	Apr. 2	Apr. 18	.....
..	.....	.....	.....	.....	.....	.....	.....	.....	.....	Apr. 1	Apr. 4	.....	.....	.....	May 2	Apr. 11	.....	.....	.....
..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
..	.....	.....	.....	.....	.....	.....	.....	.....	.....	Apr. 10	May 11	.....	.....	.....	May 8	.....	.....	.....	.....
25	May 30	May 13	May 11	May 13	May 12	May 13	.....	.....	.....	.....	.....	May 13	May 20	.....	.....	May 17	May 6	.....	.....
19	Apr....	.....	.....	Apr. 17	Apr. 15	Apr. 21	Apr. 24	Apr. 14	.....	Apr. 3	Apr. 14	.....	Apr. 13	.....	May 8	Apr. 18	Apr. 19	.....	.....
..	Apr. 27	.....	.....	.....	Apr. 15	Apr. 22	.....	.....	.....	Apr. 8	Apr. 15	Apr. 22	Apr. 22	.....	.....	Apr. 19	Apr. 24	Apr. 18	Apr. 17
..	.....	.....	.....	.....	.....	.....	.....	.....	.....	May 16	May 11	.....	May 16	.....	.....	May 8	May 2	May 14	.....
13	Apr. 18	Apr. 18	Apr. 6	.....	Apr. 23	Apr. 24	Apr. 27	Apr. 5	Apr. 15	Apr. 4	Apr. 14	Apr. 22	Apr. 10	Mar. 31	Apr. 14	Apr. 28	Apr. 3	Apr. 14	Apr. 18
13	.....	.....	.....	.....	Apr. 30	Apr. 24	.....	.....	.....	May 3	May 8	.....	.....	.....	May 8	.....	.....	.....	.....
..	.....	.....	.....	May 28	.....	.....	.....	.....	.....	May 6	.....	May 30	May 26	.....	May 31	May 14	May 11	May 18	.....
29	Apr. 22	May 1	Apr. 19	May 5	Apr. 30	Apr. 26	May 2	Apr. 24	Apr. 28	Apr. 23	Apr. 27	Apr. 24	Apr. 28	Apr. 28	Apr. 29	Apr. 30	Apr. 29	Apr. 26	May 2
11	May 10	May 12	May 12	.....	May 20	.....	.....	May 15	.....	May 12	May 15	May 15	May 26	May 8	May 23	May 6	May 4	May 17	.....
9	May 8	May 12	May 11	May 19	May 14	May 15	.....	May 6	May 18	May 5	May 5	May 11	May 10	May 27	May 10	May 18	May 5	May 4	.....
8	May 2	.....	.....	May 22	.....	May 15	May 8	.....	May 7	Apr. 29	May 5	May 16	.....	May 7	.....	May 4	May 12	.....	.....
27	.....	Apr. 9	Mar. 31	Mar. 26	Apr. 27	Apr. 3	.....	.....	Apr. 10	Mar. 26	Mar. 24	Apr. 12	Mar. 30	Mar. 30	Apr. 4	Apr. 5	Apr. 2	Apr. 5	Apr. 11
26	May 20	May 14	May 16	May 22	May 24	May 15	May 12	May 16	.....	May 8	May 10	May 14	May 17	.....	May 22	Apr. 21	Apr. 20	May 17	.....
9	May 4	Apr. 26	Apr. 25	May 2	Apr. 30	May 3	May 3	Apr. 30	May 1	Apr. 19	May 12	.....	May 26	May 5	May 4	May 11	Apr. 29	May 4	.....
3	May 5	May 8	May 15	May 22	May 6	May 8	May 8	May 8	May 5	May 6	May 5	May 13	May 11	May 30	May 8	Apr. 20	May 5	May 12	May 13
13	.....	Apr. 6	Apr. 31	Mar. 27	Apr. 23	Apr. 11	Mar. 25	Apr. 15	Apr. 18	May 6	Apr. 14	.....	.....	May 20	Apr. 4	Apr. 24	Apr. 1	Apr. 11	.....
24	Apr. 5	.....	Apr. 11	Mar. 27	Apr. 23	Apr. 12	.....	Mar. 25	Apr. 6	Mar. 28	Apr. 4	.....	Mar. 17	May 30	May 31	Apr. 4	Mar. 17	Apr. 3	Mar. 31
4	Apr. 5	Apr. 14	Apr. 6	Mar. 18	Apr. 9	Apr. 6	Mar. 26	Mar. 26	Apr. 4	Mar. 29	aMar. 10	Apr. 2	Mar. 24	Mar. 28	Apr. 2	Apr. 4	Mar. 24	Apr. 3	Mar. 26
9	May 4	May 10	May 11	May 11	May 4	May 8	May 6	May 3	May 5	May 8	May 6	May 5	May 5	May 5	May 5	.....	May 4	May 4	May 8
..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Apr. 14	.....	Mar. 26	May 7	.....	Apr. 20	Apr. 2	.....	.....
1	.....	Apr. 1	Apr. 18	Apr. 13	Apr. 1	Mar. 26	Mar. 23	Mar. 18	Mar. 10	Mar. 29	Mar. 30	Mar. 25	Mar. 19	June 14	May 8	Mar. 9	Mar. 16	.....	Mar. 24
19	Apr. 20	Apr. 18	Apr. 11	.....	Apr. 1	Apr. 21	Apr. 22	Mar. 26	Apr. 8	Mar. 31	aApr. 8	.....	Apr. 9	Mar. 31	Feb. 23	Apr. 7	Apr. 12	Apr. 3	.....
8	Apr. 14	Apr. 17	Apr. 10	Apr. 30	Apr. 23	.....	.....	.....	.....	Mar. 29	Apr. 14	Apr. 17	Mar. 26	May 27	June 10	Apr. 21	Apr. 4	Apr. 11	Apr. 14
..	.....	.....	.....	.....	.....	.....	.....	.....	.....	May 6	Apr. 16	.....	.....	Mar. 28	.....	.....	.....	Apr. 19	.....
1	Apr. 23	May 14	Apr. 25	.....	.....	May 9	.....	.....	.....	May 5	May 5	.....	Apr. 27	Apr. 28	.....	May 11	May 9	May 14	May 11
1	Apr. 20	May 14	Apr. 25	.....	Apr. 29	May 4	.....	.....	May 5	Apr. 13	aApr. 25	May 2	May 4	Apr. 23	Apr. 30	Apr. 26	Apr. 14	Apr. 20	May 8
1	Apr. 15	Apr. 16	Apr. 6	Apr. 15	Apr. 19	Apr. 20	Apr. 19	Apr. 5	Apr. 14	Mar. 31	Apr. 15	Apr. 18	Mar. 30	Mar. 30	Apr. 14	Apr. 21	Apr. 4	Apr. 14	Apr. 25
1	May 1	.....	.....	.....	.....	.....	.....	.....	.....	Apr. 2	Apr. 14	.....	Apr. 10	Mar. 31	Apr. 14	Apr. 20	Mar. 30	Apr. 3	Apr. 23
26	.....	Apr. 5	Mar. 18	Mar. 14	.....	Mar. 30	Mar. 23	Mar. 17	Mar. 29	Mar. 21	Apr. 4	Mar. 14	Mar. 17	Mar. 16	Mar. 6	Mar. 27	Mar. 16	Mar. 13	Apr. 2
..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Apr. 14	.....	Mar. 24	Apr. 10	.....
..	.....	.....	.....	.....	.....	.....	.....	.....	.....	Apr. 30	Apr. 26	May 4	May 6	Apr. 5	Apr. 19	Apr. 20	May 2	Apr. 20	.....
..	.....	May 12	May 12	May 22	May 9	May 9	May 10	May 8	May 4	May 21	.....	.....	May 12	May 9	May 6	May 7	May 4	May 7	May 10
10	May 18	May 12	.....	May 21	May 13	May 15	.....	.....	.....	May 22	May 18	May 7	May 30	May 9	May 24	May 14	May 8	May 17	.....
..	May 8	May 8	May 21	May 22	May 13	May 11	.....	May 10	.....	.....	May 19	.....	May 9	May 9	May 16	May 8	May 4	May 17	May 11
..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	May 8	.....	May 7	.....	.....
8	Apr. 29	Apr. 26	.....	.....	May 7	.....	.....	May 7	.....	Apr. 29	May 5	.....	.....	.....	.....	June 11	May 5	May 1	.....
1	Apr. 20	Apr. 26	Apr. 25	Apr. 30	Apr. 29	Apr. 24	.....	.....	Apr. 30	Apr. 21	Apr. 28	Apr. 25	Apr. 23	.....	.....	May 7	Apr. 22	Apr. 28	Apr. 18
..	May 10	.....	.....	.....	.....	.....	Apr. 26	Apr. 30	.....	Apr. 15	Apr. 18	.....	.....	.....	May 5	Apr. 29	.....	.....	.....
..	.....	.....	.....	.....	.....	.....	.....	.....	.....	May 6	May 5	.....	May 27	.....	.....	May 8	May 5	.....	.....
13	May 17	May 16	.....	May 22	May 28	May 13	.....	May 11	.....	May 10	May 5	May 7	May 17	May 20	May 16	May 8	May 6	May 8	May 8
12	May 11	May 1	May 7	May 12	May 4	May 2	May 7	May 6	May 3	May 11	May 15	May 3	May 13	.....	May 2	Apr. 29	May 2	May 2	May 7
11	May 12	.....	May 9	May 17	May 7	May 8	May 8	May 10	May 8	.....	.....	.....	.....	May 21	May 4	.....	May 3	May 5	.....
..	Apr. 27	.....	.....	.....	.....	.....	.....	Apr. 29	May 10	Apr. 30	May 5	May 5	Apr. 30	Apr. 30	Apr. 30	May 4	May 3	Apr. 20	May 14
..	.....	.....	.....	.....	.....	.....	.....	.....	.....	Apr. 30	May...	.....	.....	.....	May 2	May 8	May 8	May 2	May 3
..	.....	.....	.....	.....	.....	.....	.....	.....	May 13	May 11	May 9	May 4	.....	.....	May 14	.....	May 6	May 8	.....
9	May 3	Apr. 19	Apr. 29	May 9	May 1	May 3	May 8	May 3	May 5	Apr. 30	May 5	May 3	Apr. 30	May 3	May 1	Apr. 29	Apr. 29	Apr. 30	May 2
14	Apr. 29	.....	.....	May 13	.....	May 10	.....	.....	.....	May 4	May 5	May 22	May 3	May 4	May 2	May 11	May 3	.....	.....
..	.....	.....	.....	.....	.....	.....	May 8	May 8	May 13	Apr. 30	May 3	May 4	Apr. 26	Apr. 30	Apr. 30	Apr. 30	Apr. 23	May 2	May 4
13	May 12	.....	.....	May 17	.....	May 8	May 8	Apr. 29	May 13	May 4	May 5	.....	May 3	May 7	May 2	May 11	May 5	May 18	.....
12	May 10	.....	.....	May 22	.....	May 9	.....	May 4	May 13	May 5	May 9	May 4	May 4	May 6	May 6	May 4	May 5	May 3	May 8
..	.....	.....	.....	.....	.....	.....	.....	.....	.....	May 22	.....	.....	May 16	.....	May 14	.....	May 11	.....	May 16
..	.....	.....	.....	.....	.....	.....	.....	.....	.....	May 19	.....	.....	.....	.....	May 22	May 17	May 17	.....	.....
12	May 12	.....	May 20	.....	.....	May 11	.....	May 10	May 10	May 4	May 5	.....	May 3	May 7	May 2	May 6	May 3	May 2	Apr. 28
13	Apr. 29	.....	.....	May 12	May 7	May 11	.....	.....	.....	Apr. 30	Apr. 30	.....	May 3	May 30	Apr. 30	May 6	Apr. 29	Apr. 30	May 1
..	.....	.....	.....	.....	.....	.....	.....	.....	.....	May 5	.....	.....	.....	.....	.....	.....	.....	Apr. 28	.....
19	Apr. 29	.....	Apr. 22	.....	May 14	May 13	May 8	.....	May 8	May 5	May 5	May 12	May 12	May 4	May 4	May 11	Apr. 29	May 10	.....
..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Apr. 29	Apr. 27	.....	.....	.....	.....	.....	.....
..	.....	.....	.....	.....	.....	.....	.....	.....	.....	May 11	.....	.....	.....	May 20	.....	.....	.....	.....	.....
14	May 12	May 12	May 15	May 22	May 7	.....	May 8	.....	.....	May 6	May 12	May 3	May 12	May 3	May 5	May 6	May 4	May 7	.....
..	.....	.....	.....	.....	.....	.....	.....	.....	.....	May 20	.....	May 11	.....	May 9	May 12	May 11	May 9	.....	.....
10	May 8	May 12	May 15	May 19	May 13	May 9	May 5	May 6	May 7	May 4	May 5	May 3	May 3	May 2	May 2	May 4	May 4	May 4	.....
..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	May 10	.....	.....	.....	.....	.....	.....	.....	.....
11	May 10	May 16	May 11	May 11	May 16	.....	May 8	May 13	May 13	May 6	Apr. 28	May 12	May 6	May 3	May 6	May 2	May 5	May 6	May 8
...	May 1	May 11	May 15	.....	.....	.....	.....	.....	.....	Apr. 30	Apr. 30	.....	May 7	Apr. 27	Apr. 26	May 2	Apr. 26	Apr. 26	.....
..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	May 11	.....	.....	May 5	Apr. 30	May 8	Apr. 30	Apr. 30	.....
..	.....	.....	.....	.....	.....	.....	.....	.....	.....	Apr. 28	Apr. 28	.....	.....	Apr. 30	.....	.....	May 3	.....	.....
..	.....	.....	.....	.....	.....	.....	.....	.....	.....	Apr. 27	Apr. 21	.....	Apr. 22	Apr. 27	Apr. 16	Apr. 19	Apr. 19	Apr. 14	.....
..	.....	May 3	May 11	May 12	May 8	May 8	May 6	.....	May 5	May 12	May 16	May 12	.....	May 7	May 6	May 8	May 9	.....	.....
..	.....	.....	.....	.....	.....	.....	May 8	May 3	May 13	Apr. 26	May 10	.....	May 12	May 21	May 24	May 3	May 3	May 7	May 13
..	.....	.....	.....	.....	.....	.....	.....	.....	.....	May 30	.....	May 13	.....	.....	.....	May 17	May 7	.....	.....
..	.....	.....	.....	.....	.....	.....	.....	.....	.....	Apr. 3	Apr. 14	.....	.....	Apr. 30	Apr. 19	Apr. 21	Apr. 1	.....	.....
21	.....	Mar. 24	Mar. 11	Mar. 13	Mar. 29	Mar. 23	Mar. 7	Mar. 17	Mar. 24	Mar. 18	aFeb. 27	Mar. 22	Mar. 16	Mar. 16	Feb. 23	Mar. 25	Mar. 15	Mar. 18	Mar. 10
19	.....	Mar. 30	Mar. 11	Mar. 22	Mar. 25	Mar. 26	Mar. 21	Mar. 15	Mar. 7	Mar. 7	Mar. 7	Mar. 10	.....	Mar. 17	Mar. 6	Mar. 27	Mar. 15	Feb. 24	Mar. 25

tered.

SPRING MIGRATION: ARRIVALS

90 transients commonly reported	Staten Island 1900	Long Island City 1900	Shelter Island 1896	Newburgh 1900	Newburgh 1905	Carmel 1900	Carmel 1905	Carmel 1906	Stanfordville 1900	Stanfordville 1905	Stanfordville Earliest	Stanfordville 20 yrs average
Horned grebe						Apr. 8						
Pied-billed grebe						Apr. 10						
Canada goose		Mar. 16				Mar. 30		Mar. 31				
American bittern	Apr. 13	Apr. 23		May 1		Apr. 4						
Great blue heron		May 6				Mar. 30		Apr. 6				
Green heron	Apr. 28	May 3	May 17			May 13		May 21	May 20		Apr. 30	May 27
Sora												
American woodcock						Mar. 30	Mar. 20	Apr. 5		Mar. 25	Mar. 25	Apr. 17
Wilson snipe		Apr. 4	Apr. 13		May 8	Apr. 16	Apr. 25					
Greater yellow-legs		Apr. 28	Apr. 17									
Solitary sandpiper		May 7	May 12			May 7						
Spotted sandpiper	May 9	Apr. 27	Apr. 23			Apr. 26	Apr. 24	Apr. 20	Apr. 23	May 15	Apr. 21	May 5
Killdeer		Mar. 19				Mar. 23						
Mourning dove		Mar. 27	Mar. 24			Apr. 1	Apr. 8	Apr. 21				
Marsh hawk												
Sparrow hawk				Apr. 6		Mar. 20						
Osprey	Apr. 16	Mar. 26	Mar. 30		Apr. 9		Apr. 10	Apr. 15				
Black billed cuckoo	May 19		May 20		May 12	May 13	May 3					
Belted kingfisher	Apr. 1	Apr. 4		Apr. 29	Apr. 1	Res.			Apr. 19			
Yellow-bellied sapsucker	Apr. 5			May 15		Apr. 30						
Red-headed woodpecker				May 2								
Northern flicker	Mar. 5	Mar. 10		Apr. 24	Mar. 13	Apr. 9	Mar. 20	Apr. 11	Apr. 12	Mar. 29	Mar. 19	Apr. 13
Whip-poor-will				Apr. 29	May 7	Apr. 30	May 8	May 5	Apr. 20			
Nighthawk			May 18	May 14	May 7	Apr. 30	May 6		Apr. 28	May 15	May 7	May 17
Chimney swift	May 2	Apr. 22	May 2	Apr. 30	Apr. 21	Apr. 24	Apr. 21	Apr. 26	Apr. 28	Apr. 26	Apr. 24	Apr. 30
Ruby-throated humming bird			May 22	May 17	May 21	May 20	May 7	May 21	May 8	May 8	May 5	May 11
Kingbird	May 1	May 8	May 9		May 9	Apr. 29	May 3	Apr. 30	May 2	May 3	May 1	May 9
Crested flycatcher	May 13		May 1		May 20	May 7	May 11	May 26	May 18	May 11	May 4	May 9
Phoebe	Mar. 28	Mar. 27	Apr. 15		Mar. 25	Apr. 1	Mar. 19	Apr. 4	Mar. 23	Mar. 19	Mar. 14	Mar. 24
Wood pewee	May 18	May 13	May 16		May 16	May 13	May 16	May 16	May 13	May 12	May 12	May 20
Least flycatcher	Apr. 29		May 4		May 6	Apr. 30	Apr. 28	Apr. 30	May 8	May 12	May 2	May 5
Bobolink			May 5		May 8	Apr. 30	Apr. 25	May 1	May 26	May 15		
Cowbird	Mar. 21	Apr. 3	Mar. 20			Apr. 4	Mar. 23	Apr. 4	Apr. 3	Mar. 23	Mar. 7	Mar. 23
Red winged blackbird	Mar. 21	Mar. 12	Feb. 15		Mar. 25	Mar. 24	Mar. 16	Mar. 28	Apr. 3	Apr. 27	Mar. 15	Apr. 5
Meadowlark					Mar. 13				Apr. 18	Apr. 27	Mar. 25	Apr. 18
Baltimore oriole	Apr. 30	May 3	May 4	May 7	May 3	May 8	May 3	May 4	May 3	May 4	May 3	May 5
Rusty blackbird		Mar. 19	Mar. 31			Apr. 1	Mar. 17	Apr. 6		Mar. 18	Mar. 9	Mar. 15
Crow blackbird	Mar. 14	Mar. 17	Mar. 8		Mar. 25	Mar. 23	Mar. 23	Mar. 11				
Purple finch	Mar. 14		Apr. 23		Apr. 16	Apr. 17	Apr. 14	Apr. 4	Apr. 15	Apr. 25	Jan. 26	Apr. 12
Vesper sparrow			Apr. 10		Mar. 20	Apr. 2	Mar. 20	Apr. 4	Apr. 15	Apr. 4	Mar. 24	Apr. 8
Savannah sparrow		Apr. 9			Apr. 2							
White-crowned sparrow					May 5	May 2				May 8		May 13
White-throated sparrow	Mar. 2	wv.	Apr. 23		Apr. 26	Apr. 29		Apr. 29	Apr. 29	Apr. 14	Mar. 20	Apr. 25
Chipping sparrow	Mar. 28	Apr. 14	Apr. 14	Apr. 5	Mar. 20	Apr. 19	Apr. 14	Apr. 14	Apr. 19	Mar. 30	Mar. 30	Apr. 15
Field sparrow	Apr. 1	Apr. 7	Apr. 13		Apr. 2	Apr. 20	Mar. 31	Apr. 5	Apr. 14	Mar. 27	Mar. 18	Apr. 2
Song sparrow	Res.		Mar. 24		Mar. 11	Res.			Mar. 23	Mar. 18	Feb. 26	Mar. 15
Fox sparrow	Mar. 9	Mar. 19	Apr. 10		Apr. 19	Mar. 23	Mar. 23	Mar. 17	Apr. 2			
Towhee	Mar. 28	Apr. 30	Apr. 21		Mar. 25	Apr. 30	Apr. 26	Apr. 20	Apr. 16	Apr. 26	Apr. 16	Apr. 28
Rose-breasted grosbeak	May 6			May 6	May 8	May 9	May 6	May 7	May 10	May 6	May 5	May 11
Indigo bird	May 25			May 8	May 8	May 9	May 15	May 26	May 14	May 15	Apr. 28	May 14
Scarlet tanager		May 7	May 14	May 10	May 7	May 9	May 6	May 9	May 8	May 15	May 8	May 10
Purple martin	May 21		Apr. 26	May 11		May 23						
Cliff swallow				May 3	Apr. 26	May 1	May 1					
Barn swallow	Apr. 18	Apr. 22	Apr. 15	May 6	Apr. 26	Apr. 17	Apr. 17	Apr. 16	Apr. 23	May 12	Apr. 23	May 4
Tree swallow		Apr. 11	Mar. 31		Apr. 21	Apr. 9	Apr. 17					
Bank swallow				May 6		Apr. 30	Apr. 15	Apr. 16				
Red-eyed vireo	May 18		May 14	May 6	May 8	May 2	May 7	May 2	May 13	May 12	May 7	May 12
Warbling vireo				May 6	May 4				May 14	May 6	Apr. 29	May 6
Yellow-throated vireo				May 14	May 3	May 7	May 3	May 4	May 3	May 12	May 1	May 9
Black and white warbler	Apr. 25		Apr. 22	May 6	May 9	Apr. 25	Apr. 28	Apr. 20	May 3	Apr. 27	Apr. 19	Apr. 27
Nashville warbler			May 4			May 6	May 4	May 10				
Parula warbler			Apr. 24			May 12	May 15	May 12	May 3	May 7	May 1	May 9
Yellow warbler	Apr. 28	May 3	Apr. 30		May 7	May 2	May 2	Apr. 30	May 2	May 3	Apr. 29	May 3
Black-throated blue warbler	Apr. 24					May 9	May 10	May 10	May 10			
Myrtle warbler	Apr. 22	Apr. 30			[a]May 5	Apr. 24	Apr. 21	Apr. 25	May 3	Apr. 26	Apr. 26	Apr. 30
Magnolia warbler		May 12	May 15	May 23	May 22	May 9	May 7	May 14	May 17	May 18	May 3	May 13
Chestnut-sided warbler		May 7	May 4		May 9	May 9	May 10	May 10	May 20	May 18	May 12	May 16
Bay-breasted warbler				May 20	May 22	May 9	May 15					
Black-poll warbler	May 25		May 15	May 20		May 20	May 17	May 17				
Blackburnian warbler			May 22		May 9	May 9	May 10	May 11		May 15	May 12	May 14
Black-throated green warbler		May 12	Apr. 22	May 12	May 9	May 9	Apr. 29	Apr. 29	May 8			
Palm warbler						Apr. 16	Apr. 21	Apr. 20				
Ovenbird	Apr. 25	May 3	Apr. 28		May 8	May 2	May 3	May 4	May 9	May 6	May 3	May 8
Water thrush						Apr. 24				Apr. 25	Apr. 25	May 1
Mourning warbler				May 10			May 14					
Northern yellow-throat	May 24		May 9		May 9	May 9	May 5	May 5	May 9	May 5	May 5	May 9
Canadian warbler	May 20	May 13			May 10	May 9	May 13	May 10	May 19	May 22	May 12	May 19
American redstart		Apr. 23	May 2		May 8	May 2	May 4	May 5	Apr. 30	May 6	Apr. 30	May 7
American pipit												
Catbird	Apr. 30	May 20	Apr. 30		May 7	May 3	May 3	May 4	May 6	May 3	May 1	May 7
Brown thrasher	Apr. 21	Apr. 28	Apr. 21		Apr. 28	Apr. 30	Apr. 20	Apr. 21	May 1	Apr. 21	Apr. 19	Apr. 30
House wren		May 5		Apr. 29	Apr. 22	Apr. 30	Apr. 23	Apr. 25	May 3	May 3	Apr. 18	May 1
Winter wren	Mar. 20											
Ruby-crowned knight		May 12	Apr. 23	Apr. 29	Apr. 22				Apr. 19	Apr. 14	Apr. 5	Apr. 16
Wood thrush	Apr. 27		May 4		May 5	Apr. 30	May 2	May 4	May 9	May 7	May 3	May 7
Wilson thrush	May 12		May 16		May 8	Apr. 30	May 8	Apr. 19	May 12	May 5	May 4	May 7
Olive-backed thrush												
Hermit thrush		Apr. 2		May 2	Mar. 25							
American robin	Mar. 3	Mar. 13	Mar. 20		[a]Mar. 13	Mar. 4	Mar. 14	Feb. 23	Mar. 10	Mar. 14	Feb. 24	Mar. 9
Bluebird	Mar. 14	Mar. 12			[a]Mar. 12	Feb. 22	Mar. 9	Feb. 21	Feb. 16	Mar. 10	Feb. 14	Mar. 1

90 transients commonly reported	Ballston Spa 1889	1890	1891	1892	1893	1894	1896	1897	1898	1899	1900	1904	1905	1906
Horned grebe														
Pied-billed grebe														
Canada goose														
American bittern														
Great blue heron														
Green heron	May 29	May 7				May 10	May 9					May 8		
Sora														
American woodcock														
Wilson snipe														
Greater yellow-legs														
Solitary sandpiper														
Spotted sandpiper	May 2	May 7		May 5	May 14	Apr. 30				May 14	May 13	May 8		
Killdeer		May 2		May 3	Apr. 22					Apr. 12				
Mourning dove	Apr. 8	Apr. 14	Apr. 18	Apr. 5	Apr. 27	Apr. 15			Apr. 2			Apr. 15	Mar. 29	Apr. 7
Marsh hawk														
Sparrow hawk														
Osprey														
Black billed cuckoo	May 18	May 12	May 4	May 5	May 25	May 30	May 13	May 11	May 13	May 12	May 13			
Belted kingfisher	Apr. 28	Apr. 14	Apr. 14	Apr. 8	Apr. 19	Apr.			Apr. 17	Apr. 15	Apr. 21	Apr. 24	Apr. 14	
Yellow-bellied sapsucker		Apr. 14	Apr. 14	Apr. 5		Apr. 27				Apr. 15	Apr. 22			
Red-headed woodpecker														
Northern flicker	Apr. 13	Apr. 9	Apr. 15	Apr. 20	Apr. 13	Apr. 18	Apr. 18	Apr. 6		Apr. 23	Apr. 24	Apr. 27	Apr. 5	Apr. 15
Whip-poor-will	May 10				May 13					Apr. 30	Apr. 24			
Nighthawk	May 14	May 15	May 14	May 27					May 28					
Chimney swift	Apr. 21	Apr. 30	Apr. 21	May 3	Apr. 20	Apr. 22	May 1	Apr. 19	May 5	Apr. 30	Apr. 26	May 2	Apr. 24	Apr. 28
Ruby-throated humming bird	May 23	May 11	May 10	May 9	May 11	May 10	May 12	May 12		May 20			May 15	
Kingbird	May 9	May 2	May 7	May 3	May 9	May 8	May 12	May 11	May 19	May 14	May 15		May 6	May 18
Crested flycatcher	May 9	May 5	May 10	May 3	May 8	May 2			May 22		May 15	May 8		May 7
Phoebe	Apr. 1	Apr. 3	Apr. 9	Apr. 3	Mar. 27		Apr. 9	Mar. 31	Mar. 26	Apr. 27	Apr. 3			Apr. 10
Wood pewee	May 18	May 17	May 22	May 19	May 26	May 20	May 14	May 16	May 22	May 24	May 15	May 12	May 16	
Least flycatcher		May 5		May 3	May 9	May 4	Apr. 26	Apr. 25	May 2	Apr. 30	May 3	May 3	Apr. 30	May 1
Bobolink	May 8	May 7	May 8	May 9	May 3	May 5	May 8	May 15	May 22	May 6	May 8	May 8	May 8	May 5
Cowbird	Apr. 6	Mar. 26	Mar. 27	Mar. 30	Apr. 13		Apr. 6	Apr. 31	Mar. 27	Apr. 23	Apr. 11	Mar. 25	Apr. 15	Apr. 18
Red winged blackbird	Apr. 13	Mar. 20	Apr. 1	Apr. 2	Mar. 24	Apr. 5		Apr. 11	Mar. 27	Apr. 23	Apr. 12		Mar. 25	Apr. 6
Meadowlark	Apr. 8	Apr. 2	Mar. 24	Apr. 2	Apr. 4	Apr. 5	Apr. 14	Apr. 6	Mar. 18	Apr. 9	Apr. 6	Mar. 26	Mar. 26	Apr. 4
Baltimore oriole	May 7	May 5	May 10	May 3	May 9	May 4	May 10	May 11	May 11	May 4	May 8	May 6	May 3	May 5
Rusty blackbird														
Crow blackbird	Apr. 3	Apr. 1	Mar. 25	Apr. 1	Apr. 1		Apr. 1	Apr. 18	Apr. 13	Apr. 1	Mar. 26	Mar. 23	Mar. 18	Mar. 10
Purple finch	Apr. 21	Apr. 20	Apr. 14		Apr. 10	Apr. 20	Apr. 18	Apr. 11		Apr. 1	Apr. 21	Apr. 22	Mar. 26	Apr. 8
Vesper sparrow	Apr. 8	Apr. 19	Apr. 14	Apr. 1	Apr. 8	Apr. 14	Apr. 17	Apr. 10	Apr. 30	Apr. 23				
Savannah sparrow														
White-crowned sparrow	May 9	May 4		Apr. 29	May 1	Apr. 23	May 14	Apr. 25			May 9			
White-throated sparrow	Apr. 28	May 4	Apr. 28	Apr. 29	May 1	Apr. 20	May 14	Apr. 25		Apr. 29	May 4			May 5
Chipping sparrow	Apr. 12	Apr. 7	Apr. 14	Apr. 1	Apr. 1	Apr. 15	Apr. 16	Apr. 6	Apr. 15	Apr. 19	Apr. 20	Apr. 19	Apr. 5	Apr. 14
Field sparrow	Apr. 28	Apr. 29	Apr. 29	Apr. 27	May 1	May 1								
Song sparrow		Mar. 7	Mar. 25	Mar. 28	Mar. 26		Apr. 5	Mar. 18	Mar. 14		Mar. 30	Mar. 23	Mar. 17	Mar. 29
Fox sparrow														
Towhee														
Rose-breasted grosbeak	May 12	May 29		May 29			May 12	May 12	May 22	May 9	May 9	May 10	May 8	May 4
Indigo bird	May 14	May 13	May 10	May 9	May 10	May 18	May 12		May 21	May 13	May 15			
Scarlet tanager	May 8	May 29	May 18			May 8	May 8	May 21	May 22	May 13	May 11		May 10	
Purple martin			May 18											
Cliff swallow	May 6	May 10	May 6	May 2	May 8	Apr. 29	Apr. 26			May 7			May 7	
Barn swallow	Apr. 21	Apr. 22	Apr. 14	Apr. 26	May 1	Apr. 20	Apr. 26	Apr. 25	Apr. 30	Apr. 29	Apr. 24			Apr. 30
Tree swallow	Apr. 21	Apr. 29	Apr. 16	May 8		May 10						Apr. 26	Apr. 30	
Bank swallow														
Red-eyed vireo		May 25		May 26	May 13	May 17	May 16		May 22	May 28	May 13		May 11	
Warbling vireo			May 1	May 3	May 12	May 11	May 1	May 7	May 12	May 4	May 2	May 7	May 6	May 3
Yellow-throated vireo				May 24	May 11	May 12		May 9	May 17	May 7	May 8	May 8	May 10	May 8
Black and white warbler			May 4	May 3		Apr. 27							Apr. 29	May 10
Nashville warbler														
Parula warbler														May 13
Yellow warbler	May 9	May 5	May 1	May 3	May 9	May 3	Apr. 19	Apr. 29	May 9	May 1	May 3	May 8	May 3	May 5
Black-throated blue warbler		May 7	May 10	May 3	May 14	Apr. 29			May 13		May 10			
Myrtle warbler												May 8	May 8	May 13
Magnolia warbler	May 12	May 10	May 4	May 22	May 13	May 12			May 17		May 8	May 8	Apr. 29	May 13
Chestnut-sided warbler	May 13		May 10	May 22	May 12	May 10			May 22		May 9		May 4	May 13
Bay-breasted warbler														
Black-poll warbler														
Blackburnian warbler			May 12	May 3	May 12	May 12		May 20			May 11		May 10	May 10
Black-throated green warbler			May 9	May 3	May 13	Apr. 29			May 12	May 7	May 11			
Palm warbler														
Ovenbird		May 10	May 22		May 19	Apr. 29		Apr. 22		May 14	May 13	May 8		May 8
Water thrush														
Mourning warbler														
Northern yellow-throat	May 14	May 3			May 14	May 12	May 12	May 15	May 22	May 7		May 8		
Canadian warbler														
American redstart	May 17	May 19	May 10	May 14	May 10	May 8	May 12	May 15	May 19	May 13	May 9	May 5	May 6	May 7
American pipit														
Catbird	May 12	May 10	May 19	May 10	May 11	May 10	May 16	May 11	May 11	May 16		May 8	May 13	May 13
Brown thrasher	May 2	Apr. 28	May 7			May 1	May 11	May 15						
House wren														
Winter wren														
Ruby-crowned knight														
Wood thrush	May 12	Apr. 22		May 3			May 3	May 11	May 12	May 8	May 8	May 6		May 5
Wilson thrush												May 8	May 3	May 13
Olive-backed thrush														
Hermit thrush														
American robin		Mar. 13	Mar. 20	Mar. 7	Mar. 21		Mar. 24	Mar. 11	Mar. 13	Mar. 29	Mar. 23	Mar. 7	Mar. 17	Mar. 24
Bluebird		Mar. 4	Mar. 12	Mar. 6	Mar. 19		Mar. 30	Mar. 11	Mar. 22	Mar. 25	Mar. 26	Mar. 21	Mar. 15	Mar. 7

90 transients commonly reported	Gloversville 1905	Gloversville 1906	Elmira 1900	Elmira 1905	Corning 1905	Corning 1906	Binghamton 1900	Binghamton 1905	Binghamton 1906	Cincinnatus 1900
Horned grebe										
Pied-billed grebe										
Canada goose		Feb. 27								
American bittern	May 7									
Great blue heron	May 6	Apr. 13					May 8	May 27		
Green heron	Apr. 28	May 19				May 8	May 7	May 12		
Sora										
American woodcock	Mar. 29	Apr. 14				May 14				
Wilson snipe		Apr. 14						Apr. 20	Apr. 21	
Greater yellow-legs										
Solitary sandpiper		May 5					May 6	May 2	May 4	May 14
Spotted sandpiper		May 5					Apr. 23	May 11		Apr. 25
Killdeer	Mar. 29	Apr. 3								
Mourning dove	May 8	May 5				Apr. 22	Apr. 7	Apr. 2	Apr. 18	
Marsh hawk	Apr. 1	Apr. 4				May 2	Apr. 11			
Sparrow hawk										
Osprey	Apr. 10	May 11				May 8				
Black billed cuckoo			May 13	May 20			May 17	May 6		
Belted kingfisher	Apr. 3	Apr. 14		Apr. 13		May 8	Apr. 18	Apr. 19		
Yellow-bellied sapsucker	Apr. 8	Apr. 15	Apr. 22	Apr. 22			Apr. 19	Apr. 24	Apr. 18	Apr. 17
Red-headed woodpecker	May 16	May 11		May 16			May 8	May 2	May 14	
Northern flicker	Apr. 4	Apr. 14	Apr. 22	Apr. 10	Mar. 31	Apr. 14	Apr. 28	Apr. 3	Apr. 14	Apr. 18
Whip-poor-will	May 3	May 8				May 8				
Nighthawk	May 6		May 30	May 26		May 31	May 14	May 11	May 18	
Chimney swift	Apr. 23	Apr. 27	Apr. 24	Apr. 28	Apr. 28	Apr. 29	Apr. 30	Apr. 29	Apr. 26	May 2
Ruby-throated humming bird	May 12	May 15	May 15	May 26	May 8	May 21	May 6	May 4	May 17	
Kingbird	May 5	May 5	May 11	May 10	May 27	May 10	May 18	May 5	May 4	
Crested flycatcher	Apr. 29	May 5	May 16		May 7		May 4	May 12		
Phoebe	Mar. 26	Mar. 24	Apr. 12	Mar. 30	Mar. 30	Apr. 4	Apr. 5	Apr. 2	Apr. 5	Apr. 11
Wood pewee	May 8	May 10	May 14	May 17		May 22	Apr. 21	Apr. 20	May 17	
Least flycatcher	Apr. 19	May 12		May 26	May 5	May 4	May 11	Apr. 29	May 4	
Bobolink	May 6	May 5	May 13	May 11	May 30	May 8	Apr. 20	May 5	May 12	May 13
Cowbird	May 6	Apr. 14			May 20	Apr. 4	Apr. 24	Apr. 1	Apr. 11	
Red winged blackbird	Mar. 28	Apr. 4		Mar. 17	May 30	May 31	Apr. 4	Mar. 17	Apr. 3	Mar. 31
Meadowlark	Mar. 29	[a]Mar. 10	Apr. 2	Mar. 24	Mar. 28	Apr. 2	Apr. 4	Mar. 24	Apr. 3	Mar. 26
Baltimore oriole	May 8	May 6	May 5	May 5	May 5	May 5		May 4	May 4	May 8
Rusty blackbird		Apr. 14		Mar. 26	May 7		Apr. 28	Apr. 2		
Crow blackbird	Mar. 29	Mar. 30	Mar. 25	Mar. 19	June 14	May 8	Mar. 9	Mar. 16		Mar. 24
Purple finch	Mar. 31	[a]Apr. 8		Apr. 9	Mar. 31	Feb. 23	Apr. 7	Apr. 12	Apr. 3	
Vesper sparrow	Mar. 29	Apr. 14	Apr. 17	Mar. 26	May 27	June 10	Apr. 21	Apr. 4	Apr. 11	Apr. 14
Savannah sparrow	May 6	Apr. 16			Mar. 28				Apr. 10	
White-crowned sparrow	May 5	May 5		Apr. 27	Apr. 28		May 11	May 9	May 14	May 11
White-throated sparrow	Apr. 13	[a]Apr. 25	May 2	May 4	Apr. 23	Apr. 30	Apr. 26	Apr. 14	Apr. 20	May 8
Chipping sparrow	Mar. 31	Apr. 15	Apr. 18	Mar. 30	Mar. 30	Apr. 14	Apr. 21	Apr. 4	Apr. 14	Apr. 25
Field sparrow	Apr. 2	Apr. 14		Apr. 10	Mar. 31	Apr. 14	Apr. 20	Mar. 30	Apr. 3	Apr. 23
Song sparrow	Mar. 21	Apr. 4	Mar. 14	Mar. 17	Mar. 16	Mar. 6	Mar. 27	Mar. 16	Mar. 11	Apr. 2
Fox sparrow						Apr. 14		Mar. 24	Apr. 10	
Towhee	Apr. 30	Apr. 26	May 4	May 6	Apr. 5	Apr. 19	Apr. 20	May 2	Apr. 20	
Rose-breasted grosbeak	May 21			May 12	May 9	May 6	May 7	May 4	May 7	May 10
Indigo bird	May 22	May 18	May 7	May 30	May 9	May 24	May 14	May 8	May 17	
Scarlet tanager		May 19		May 9	May 9	May 16	May 8	May 4	May 17	May 11
Purple martin						May 8		May 7		
Cliff swallow	Apr. 29	May 5					June 11	May 5	May 1	
Barn swallow	Apr. 21	Apr. 28	Apr. 25	Apr. 23			May 7	Apr. 22	Apr. 28	Apr. 18
Tree swallow	Apr. 15	Apr. 18				May 5	Apr. 20			
Bank swallow	May 6	May 5		May 27			May 8	May 5		
Red-eyed vireo	May 10	May 5	May 7	May 17	May 20	May 16	May 8	May 6	May 8	May 8
Warbling vireo	May 11	May 15	May 3	May 13		May 2	Apr. 29	May 2	May 2	May 7
Yellow-throated vireo					May 21	May 4		May 3	May 5	
Black and white warbler	Apr. 30	May 5	May 5	Apr. 30	Apr. 30	Apr. 30	May 4	May 3	Apr. 20	May 14
Nashville warbler	Apr. 30	May				May 2	May 8	May 8	May 2	May 3
Parula warbler	May 11	May 9	May 4			May 14		May 6	May 8	
Yellow warbler	Apr. 30	May 5	May 3	Apr. 30	May 3	May 1	Apr. 20	Apr. 29	Apr. 30	May 2
Black-throated blue warbler	May 4	May 5	May 22	May 3	May 4	May 2	May 11	May 3		
Myrtle warbler	Apr. 30	May 3	May 4	Apr. 26	Apr. 30	Apr. 30	Apr. 30	Apr. 23	May 2	May 4
Magnolia warbler	May 4	May 5		May 3	May 7	May 2	May 11	May 5	May 18	
Chestnut-sided warbler	May 5	May 9	May 4	May 4	May 6	May 6	May 4	May 5	May 3	May 8
Bay-breasted warbler	May 22			May 16		May 14		May 11		May 16
Black-poll warbler	May 19					May 22	May 17	May 17		
Blackburnian warbler	May 4	May 5		May 3	May 7	May 2	May 6	May 3	May 2	Apr. 28
Black-throated green warbler	Apr. 30	Apr. 30		May 3	May 30	Apr. 30	May 6	Apr. 29	Apr. 30	May 1
Palm warbler	May 5								Apr. 28	
Ovenbird	May 5	May 5	May 12	May 12	May 4	May 4	May 11	Apr. 29	May 10	
Water thrush			Apr. 29	Apr. 27						
Mourning warbler	May 11				May 20					
Northern yellow-throat	May 6	May 12	May 3	May 12	May 3	May 5	May 6	May 4	May 7	
Canadian warbler	May 20		May 11		May 9	May 12	May 11	May 9		
American redstart	May 4	May 5	May 3	May 3	May 2	May 2	May 4	May 4	May 4	
American pipit		May 10								
Catbird	May 6	Apr. 28	May 12	May 6	May 1	May 6	May 2	May 5	May 6	May 8
Brown thrasher	Apr. 30	Apr. 30		May 7	Apr. 27	Apr. 26	May 2	Apr. 26	Apr. 26	
House wren		May 11			May 5	Apr. 30	May 8	Apr. 30	Apr. 30	
Winter wren	Apr. 28	Apr. 28			Apr. 30			May 3		
Ruby-crowned knight	Apr. 27	Apr. 21		Apr. 22	Apr. 27	Apr. 16	Apr. 10	Apr. 10	Apr. 14	
Wood thrush	May 12	May 16	May 12		May 7	May 6	May 8	May 9		
Wilson thrush	Apr. 26	May 10		May 12	May 21	May 24	May 1	May 3	May 7	May 13
Olive-backed thrush	May 30		May 13				May 17	May 7		
Hermit thrush	Apr. 3	Apr. 14			Apr. 30	Apr. 19	Apr. 21	Apr. 1		
American robin	Mar. 18	[a]Feb. 27	Mar. 22	Mar. 16	Mar. 16	Feb. 21	Mar. 25	Mar. 15	Mar. 18	Mar. 10
Bluebird	Mar. 7	Mar. 7	Mar. 10		Mar. 17	Mar. 6	Mar. 27	Mar. 15	Feb. 24	Mar. 25

[a] A few wintered.

90 TRANSIENTS COMMONLY REPORTED	CINCINNATUS		ALFRED			ITHACA					BRANCHPORT						
	1905	1906	1900	1905	1906	1903	1904	1905	1906	1907	1900	1901	1902	1903	1904	1905	19
Horned grebe								aApr. 21	May 5	Apr. 26				Apr. 5	Apr. 8		Apr.
Pied-billed grebe								Apr. 1		Apr. 26	Apr. 26						Apr.
Canada goose							Mar. 13	Mar. 22	Feb. 27	Mar. 18	Mar. 25	Mar. 13	Mar. 1	Mar. 7	Mar. 10	Mar. 18	aApr
American bittern		Apr. 29					May 12	Apr. 8	Apr. 20	Apr. 26	May 2						Apr.
Great blue heron								Mar. 30	Mar. 30	Apr. 13	Apr. 6	Apr. 4			Mar. 25	Mar. 26	Mar.
Green heron								Apr. 26	Apr. 18	May 3	Apr. 21	May 8		May 3		Apr. 30	Apr.
Sora						May 8		May 18	Apr. 26	May 4		May 9		May 1			May
American woodcock				Apr. 5				Mar. 31	July 22								Apr.
Wilson snipe								Apr. 12	Apr. 20	Mar. 17	Apr. 11						Apr.
Greater yellow legs								May 7	Apr. 29		Apr. 28	Apr. 13	May 6	May 5		Apr. 21	Apr.
Solitary sandpiper	May 16	May 2				May 7	May 1	Apr. 28	Apr. 29	May 2		May 9	May 11			May 7	Apr.
Spotted sandpiper				May 5		May 10	Apr. 25	Apr. 21	Apr. 20	Apr. 29	Apr. 24	Apr. 21	Apr. 26	May 4	Apr. 29	Apr. 23	Apr.
Killdeer								Mar. 12	Apr. 3	Mar. 17	Mar. 23	Mar. 12	Mar. 11	Mar. 5	Mar. 24	Mar. 17	Feb.
Mourning dove								Mar. 18	May 23	Apr. 24	Apr. 8	Mar. 24	Mar. 30	Mar. 15	Apr. 2	Mar. 27	Mar.
Marsh hawk								Mar. 29	June 29	Mar. 29	Apr. 10					Apr. 16	Apr.
Sparrow hawk								Mar. 16		Jan. 20					Apr. 1	Mar. 28	
Osprey							Apr. 23	Apr. 16	Apr. 5	Apr. 13	Apr. 10	Apr. 13	Mar. 28		Apr. 6		
Black-billed cuckoo			May 11		May 23			May 6	May 13	May 16	May 20					May 16	
Belted kingfisher		Apr. 13	Apr. 21	Mar. 31	Apr. 7	Apr. 3		Mar. 29	Mar. 30	Mar. 17	Apr. 18	Apr. 13	Mar. 28	Mar. 29	Apr. 2	Mar. 26	Apr.
Yellow-bellied sapsucker	Apr. 27	Apr. 19	Apr. 16		Apr. 14	Apr. 3	Apr. 13	Mar. 31	Apr. 13	Apr. 6						Apr. 16	Apr.
Red-headed woodpecker			May 11	May 6	May 17	May 7		May 6	May 2	May 2	Apr. 22					Apr. 9	
Northern flicker		Apr. 14	Apr. 8	Mar. 29	Apr. 14	Mar. 23		Apr. 2	Apr. 13	Jan. 11	Apr. 16	Apr. 7	Mar. 9	Mar. 10	Apr. 9	Mar. 28	Apr.
Whip-poor-will								May 1	Apr. 29	May 14	May 9	May 7		May 8	May 8	Apr. 28	Apr.
Nighthawk					May 18	May 22	June 10	May 13	May 15	May 17				May 15			
Chimney swift	Apr. 28	May 1	Apr. 29	May 1	Apr. 30		Apr. 25	Apr. 21	Apr. 20	Apr. 30	Apr. 28	Apr. 18	Apr. 29			Apr. 26	Apr.
Ruby-throat. hummingbird			May 14	May 13	May 15			May 5	May 12	May 18	May 18	May...	May 13	May 15	May 10	May 16	May
Kingbird		May 7	May 2	May 12	May 17	May 6		May 3	May 6	May 7	May 1	May 2			May 6	May 3	May
Crested flycatcher	May 12		May 11	May 6	May 17	May 8	May 6	May 2	May 5	May 14	May 6	May 8	Apr. 29		May 26	May 4	Apr.
Phoebe	Mar. 26	Apr. 17	Apr. 12	Mar. 26	Apr. 3	Mar. 19		Mar. 19	Apr. 3	Mar. 22	Mar. 31	Mar. 24	Mar. 21	Mar. 18	Mar. 25	Mar. 27	Apr.
Wood pewee			May 14	May 13	May 19		May 10	May 3	May 12	May 2	May 14	May 18	May 11	May 15	May 15	May 10	May
Least flycatcher			May 2	May 3	May 5	May 5	May 3	Apr. 30	May 1	May 2	May 2	May 2	May 3	Apr. 30		Apr. 30	May
Bobolink		May 2	May 8	Apr. 25	May 4	May 12	May 1	May 3	May 4	May 5	May 6	May 6	May 6		May 5	May 4	May
Cowbird	Mar. 29		Apr. 2	Mar. 26	Apr. 22	Mar. 18		Mar. 19	Apr. 4	Mar. 17	Mar. 27	Mar. 15	Mar. 12	Mar. 15	Mar. 25	Mar. 17	Apr.
Red-winged blackbird			Mar. 25	Mar. 15	Apr. 5	Mar. 13	Mar. 14	Mar. 16	Feb. 24	Mar. 17	Mar. 23	Mar. 14	Mar. 1	Mar. 4	Mar. 9	Mar. 13	Feb.
Meadowlark		Mar. 13	Apr. 1	Mar. 19	Apr. 4	Mar. 14		Mar. 18	Mar. 4	Mar. 17	Mar. 22	Mar. 20	Mar. 14	Mar. 6	Res....	Mar. 16	Mar.
Baltimore oriole	May 1	May 5	May 3	May 4	May 3	May 5	May 6	Apr. 30	May 1	May 7	May 1	May 5	Apr. 24	Apr. 30	May 5	Apr. 30	May
Rusty blackbird							Apr. 18	Apr. 1	Apr. 14	Mar. 26		Apr. 13				Apr. 24	Apr.
Crow blackbird	Mar. 26	Apr. 3	Mar. 25	Mar. 18	Apr. 3	Mar. 13		Mar. 12	Mar. 4	Feb. 4	Mar. 25	Mar. 14	Mar. 6	Mar. 12	Mar. 19	Mar. 16	Mar.
Purple finch		Apr. 12	Mar. 29	Mar. 24	Apr. 3	Mar. 27	Apr. 18	Mar. 18	Mar. 11	Feb. 19	Mar. 29	Apr. 21	Mar. 21	Apr. 9			Apr.
Vesper sparrow	Mar. 29	Apr. 12	Apr. 5	Mar. 26	Apr. 3	Mar. 23		Mar. 26	Apr. 1	Mar. 29	Apr. 8	Mar. 24	Mar. 30	Mar. 18	Apr. 3	Mar. 28	Apr.
Savannah sparrow			Apr. 22	Apr. 4	Apr. 12			Mar. 23	Apr. 6	Mar. 29							
White-crowned sparrow		May 6	May 9		May 8	May 3	May 11	May 4	Feb. 24	May 2	May 6				May 15	Apr. 30	May
White-throated sparrow	Apr. 28	May 14	May 4	Apr. 27	Apr. 21	May 1	Apr. 15	Apr. 19	Apr. 15	Apr. 27	May 6	Apr. 28	Apr. 26	May 8	May 7	Apr. 10	Apr.
Chipping sparrow		Apr. 19	Apr. 12	Mar. 31	Apr. 13	Mar. 31		Mar. 29	Apr. 11	Mar. 27	Apr. 19	Apr. 15	Apr. 6		Apr. 5	Mar. 31	Apr.
Field sparrow		Apr. 14	Apr. 18	Mar. 29	Apr. 15	Mar. 27		Mar. 28	Apr. 13	Mar. 25			Apr. 27			Apr. 9	Apr.
Song sparrow		Mar. 5	Mar. 23	Mar. 16	Feb. 27	Res....	Res....	Res....		Jan. 1		Res....	Res....	Res....	Res....	Res....	Res.
Fox sparrow								Mar. 26	Apr. 13	Mar. 17				Apr. 24		Mar. 15	Apr.
Towhee		May 1	May 7	Apr. 25	Apr. 16	May 1	May 3	Apr. 18	Apr. 29	Apr. 27	Apr. 23	Apr. 27	Apr. 29	May 5	May 6	Apr. 23	Apr.
Rose-breasted grosbeak		May 14	May 7	May 13			May 16	May 3	May 2	May 5						May 6	May
Indigo bird	May 12		May 13		May 19	May 22	May 21	May 9	May 13	May 15	May 20				May 10	May 11	May
Scarlet tanager		May 14	May 13	May 5	May 19		May 11	May 3	May 6	May 14	May 6	May 16	May 4		May 7	May 4	May
Purple martin								May 1	June 3							Apr. 20	
Cliff swallow	Apr. 27		May 13	May 3	Apr. 31			Apr. 20	Apr. 27	May 16						Apr. 30	Apr.
Barn swallow		Apr. 27	Apr. 24	Apr. 23	Apr. 31	Apr. 15	Apr. 17	Apr. 13	Apr. 14	Apr. 26	Apr. 18	Apr. 13	Apr. 16	Apr. 16	Apr. 6	Apr. 4	Apr.
Tree swallow								Mar. 30	Apr. 5	Mar. 23	Apr. 4	Apr. 9	Apr. 9	Apr. 3	Apr. 4	Mar. 27	Apr.
Bank swallow						May 1	Apr. 30	Apr. 27	Apr. 14	Apr. 30					May 5	Apr. 30	
Red-eyed vireo			May 6		May 11	May 5	May 8	May 6	Apr. 30	May 13	May 5	May 12		Apr. 30		May 4	May
Warbling vireo	May 3	May 8	May 3	May 3	May 8	May 1	May 4	Apr. 30	Apr. 30	Apr. 30	Apr. 29	May 6	Apr. 26	Apr. 30	May 5	Apr. 30	Apr.
Yellow-throated vireo			May 4	May 6	May 11	May 7	May 5	Apr. 30	Apr. 30	May 2		May 6	May 4		May 6	May 4	May
Black and white warbler			May 4	May 3	May 8	Apr. 30	May 5	Apr. 26	Apr. 29	May 1	May 7	May 8	Apr. 29	May 3	Apr. 24	Apr. 30	May
Nashville warbler			May 7	May 5	May 6	May 1	May 10	May 4	Apr. 30	May 2			May 11			Apr. 30	Apr.
Parula warbler		May 4	May 4	May 7	May 17	May 5	May 7	Apr. 30	Apr. 30	May 2				May 4		May 9	May
Yellow warbler			Apr. 30	May 3	May 1	Apr. 24	May 2	Apr. 29	Apr. 28	Apr. 30	Apr. 28	Apr. 30	Apr. 24	Apr. 29	Apr. 29	Apr. 28	May
Black-throat. blue warbler			May 25	May 5	May 13	May 3	May 9	Apr. 29	May 2	May 5	May 6		May 4	May 10	May 8	May 3	May
Myrtle warbler	Apr. 27	May 2		May 5		Apr. 29	Apr. 14	Apr. 21	Apr. 17	Apr. 24	May 6	May 1	Apr. 26	Apr. 29	May 8	Apr. 23	Apr.
Magnolia warbler				May 5	May 17	May..9	May 10	Apr. 29	May 2	Apr. 30		May 5	May 11		May 8	May 3	May
Chestnut-sided warbler		May 8	May 4	May 3			May 7	May 3	May 6	May 5		May 7			May 6	May 3	May
Bay-breasted warbler							May 11	May 7	May 13	May 16			May 11		May 8	May 12	May
Black-poll warbler	May 17	May 22	May 16				May 16	May 10	May 15	May 23	May 23	May 18				May 16	
Blackburnian warbler		May 4	May 4	May 5	May 16	May 7	May 6	May 3	May 1	May 7		May 11			May 8	Apr. 30	May
Black-throat. green warbler		May 4	May 6	May 5	May 6	Apr. 30	May 5	Apr. 30	Apr. 30	May 1	Apr. 29		May 4		May 6	Apr. 30	May
Palm warbler						May 1		May 3	May 4	May 5						Apr. 30	May
Ovenbird			May 3	May 5	May 6	May 7	May 7	Apr. 29	May 3	May 5	May 6	May 7		May 5	May 6	Apr. 30	May
Water-thrush	May 16						Apr. 30	May 3	Apr. 28	May 1					May 1	Apr. 30	Apr.
Mourning warbler							May 13	May 7	June 24	May 13						May 9	May
Northern yellow-throat			May 4	May 6		May 7	May 7	Apr. 30	May 4	May 2	May 5	May 9	May 4	May 8		Apr. 30	May
Canadian warbler		May 14	May 4	May 6	May 17		May 13	May 5	May 6	May 15					May 8	May 6	May
American redstart			May 4	May 6	May 7	May 5	May 3	Apr. 29	Apr. 20	Apr. 30	May 6		May 4		May 8	Apr. 30	Apr.
American pipit								Apr. 1	Apr. 14	Apr. 4						May 9	
Catbird		May 6	May 4	May 8	May 8	May 7	May 5	May 3	May 2	May 2	May 7	Apr. 30	May 6		May 6	May 3	May
Brown thrasher								Apr. 29	Apr. 29	May 3			Apr. 26			May 3	Apr.
House wren			May 4	Apr. 27	May 3		May 4	Apr. 26	Apr. 26	May 2							
Winter wren						aApr. 7	aMar.28	Apr. 5	Feb. 11	Mar. 24				Apr. 19		Mar. 26	Apr.
Ruby-crowned kinglet			Apr. 19	Apr. 22	Apr. 27	Apr. 19	Apr. 21	Apr. 20	Apr. 14	Apr. 12	Apr. 19	Apr. 27	Apr. 19	Apr. 22		Apr. 16	Apr.
Wood thrush			May 11	May 8	May 17		May 11	May 6	May 4	May 5	May 6		Apr. 27		Apr. 24	Apr. 20	Apr.
Wilson thrush		May 14		May 7		May 8	May 2	Apr. 29	May 1	Apr. 30	Apr. 22	May 7	May 4	May 3	Apr. 29	Apr. 30	May
Olive-backed thrush							May 7	Apr. 29	May 5	May 10							Apr.
Hermit thrush	Mar. 29	Apr. 14	Apr. 20	Apr. 27				Mar. 26	Apr. 14	Apr. 7		Apr. 14		Apr. 12		Apr. 9	Apr.
American robin	Mar. 16	Mar. 30	Feb. 18	Mar. 10	Feb. 24	Mar. 4	aMar.15	Mar. 12	Jan. 21	Mar. 16	Mar. 9	Mar. 14	Feb. 27	Mar. 2	May 4	May 6	Feb.
Bluebird	Mar. 18	Apr. 2	Mar. 16	Mar. 17	Feb. 24	Mar. 6		Mar. 12	Feb. 24	Mar. 15	Mar. 23	Mar. 14	May 1			Mar. 17	Feb.

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ARRIVALS

ERIE, PA.	JAMESTOWN		LOCK-PORT	ROCHESTER						CANANDAIGUA							GENEVA	
1900	1900	1906	1900	1902	1903	1904	1905	1906	1907	1895	1896	1897	1898	1899	1905	1906	1896	1897
Mar. 27	.....	.....	.....	Apr. 19	Mar. 18	Mar 26	Apr. 1	Mar. 1	aApr. 1	Apr. 12	Apr. 8	Mar. 23	Apr. 3	Mar. 27	Apr. 1	Apr. 14	.....	.....
Apr. 16	.....	.....	.....	May 3	Apr. 25	Mar. 23	Apr. 12	Apr. 10	Apr. 10	.....	.....	Apr. 1	.....	.....	Apr. 12	Apr. 10	.....	.....
Mar. 29	.....	.....	Mar. 5	Mar. 1	Mar. 21	Feb. 22	Mar. 26	Feb. 24	Mar. 14	Mar. 15	.....	.....	.....	.....	Mar. 18	aFeb. 24	.....	.....
Apr. 17	.....	.....	Apr. 5	Apr. 29	Apr. 19	Apr. 23	Apr. 12	Apr. 21	Apr. 21	Apr. 20	Apr. 21	Apr. 17	Apr. 12	Apr. 24	Apr. 14	Apr. 21	.....	.....
Apr. 12	.....	.....	Mar. 20	Mar. 29	Mar. 21	Mar. 20	Mar. 29	Mar. 24	Mar. 30	Mar. 28	Mar. 26	Mar. 28	Mar. 31	Mar. 29	.....	Mar. 24	May 5	.....
Apr. 19	.....	.....	.....	Apr. 24	May 3	May 21	May 4	May 1	Apr. 28	.....	May 6	.....	.....	May 10	May 13	May 1	May 30	.....
May 10	.....	.....	.....	May 3	May 15	May 17	Apr. 12	May 5	May 6	May 3	.....	.....	.....	Apr. 27	Apr. 27	May 5	.....	.....
.....	.....	.....	.....	.....	.....	Apr. 7	May 3	May 5	Apr. 29	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	May 1	.....	Apr. 20	Apr. 1	Apr. 1	Apr. 10	Apr. 13	.....	Apr. 15	.....	Mar. 20	Apr. 10	Mar. 31	Apr. 10	.....	.....
Apr. 16	.....	.....	.....	.....	Apr. 20	May 4	Apr. 12	Apr. 20	.....	Apr. 25	Apr. 21	.....	Apr. 16	Apr. 26	Apr. 14	Apr. 20	.....	.....
May 3	.....	.....	.....	.....	May 17	May 14	May 7	May 10	May 13	Apr. 29	May 2	.....	.....	May 1	May 13	May 11	.....	.....
Apr. 18	.....	.....	.....	Apr. 26	Apr. 25	Apr. 30	Apr. 24	Apr. 20	Apr. 28	Apr. 27	Apr. 14	Apr. 13	Apr. 17	Apr. 16	May 3	Apr. 20	May 5	May 9
Mar. 23	.....	.....	.....	Mar. 12	Mar. 21	Mar. 12	Mar. 18	Apr. 1	Mar. 17	Apr. 6	Mar. 27	Mar. 20	Mar. 12	.....	Mar. 18	Apr. 1	Apr. 12	Apr. 15
Apr. 2	.....	.....	Apr. 9	Mar. 21	Mar. 19	Mar. 26	Mar. 26	Apr. 2	Mar. 22	Mar. 19	Mar. 30	Mar. 12	Mar. 27	Mar. 30	Mar. 25	Apr. 2	Apr. 5	Mar. 24
Apr. 10	.....	.....	.....	Mar. 23	Mar. 19	Mar. 30	Apr. 3	Apr. 1	Mar. 23	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	Res....	Mar. 6	Mar. 31	Mar. 26	Res....	Mar. 25	Res....	Apr. 1	.....	.....	Mar. 27	Mar. 31	Res....	.....	.....
May 7	.....	.....	.....	May 3	Apr. 30	Apr. 23	Mar. 28	Mar. 26	Apr. 25	.....	Apr. 12	.....	Apr. 21	.....	.....	Mar. 26	.....	.....
May 30	May 7	.....	.....	May 17	May 20	May 8	May 12	May 6	May 16	.....	May 8	.....	May 5	May 15	.....	May 18	May 15	June 3
Apr. 7	.....	.....	.....	Apr. 12	Apr. 3	Mar. 27	Mar. 29	Apr. 2	Mar. 31	Apr. 27	Apr. 9	Apr. 5	Mar. 11	Apr. 10	Mar. 31	Apr. 10	Apr. 16	May 2
Apr. 18	.....	Apr. 14	.....	Apr. 15	Apr. 4	Apr. 8	Apr. 1	Apr. 8	Apr. 18	Apr. 14	Apr. 13	.....	Apr. 15	Apr. 6	Apr. 2	Apr. 13	Apr. 5	Apr. 4
Apr. 30	Apr. 10	.....	Apr. 18	Res....	May 7	Res....	May 5	May 4	Res.....	May 5	Res....	.....	.....	May 8	May 6	May 4	Apr. 5	.....
Apr. 17	Apr. 15	.....	Apr. 11	Mar. 22	Mar. 21	Mar. 31	Mar. 29	Apr. 7	Mar. 10	Apr. 11	Apr. 12	.....	Mar. 26	Apr. 15	Apr. 1	Apr. 7	Apr. 19	Apr. 4
May 1	.....	.....	.....	Apr. 29	May 2	May 3	May 4	May 13	May 14	.....	May 2	.....	.....	May 1	.....	May 13	.....	.....
May 16	May 10	.....	May 27	May 11	May 15	May 8	May 3	May 19	May 14	.....	May 9	.....	.....	May 5	.....	May 29	.....	June 4
.....	May 15	Apr. 24	Apr. 11	Apr. 26	Apr. 30	Apr. 23	Apr. 27	Apr. 23	May 11	Apr. 25	Apr. 19	Apr. 21	May 2	Apr. 20	Apr. 22	Apr. 24	Apr. 17	Apr. 24
May 21	May 11	May 10	May 13	May 5	May 14	May 5	May 3	May 10	May 14	May 6	.....	May 11	May 10	May 8	May 13	May 13	May 3	May 24
May 3	Apr. 28	.....	May 4	May 3	May 8	May 1	May 3	May 3	May 12	Apr. 29	Apr. 29	.....	May 8	May 2	May 6	May 5	May 10	May 9
May 3	May 28	.....	May 9	Apr. 29	May 2	May 5	May 3	May 2	May 13	.....	May 7	.....	May 8	May 7	May 2	May 10	May 9	May 9
Apr. 3	Apr. 16	.....	.....	Mar. 26	Mar. 20	Mar. 25	Mar. 26	Apr. 3	Mar. 17	.....	Apr. 8	Mar. 30	Mar. 26	Apr. 10	Mar. 26	Apr. 4	Apr. 12	Apr. 4
May 14	May 7	May 15	May 13	May 6	May 14	May 8	May 9	May 16	May 15	.....	.....	.....	.....	.....	May 13	May 16	May 20	May 14
May 5	May 3	May 4	May 7	Apr. 27	May 8	May 4	May 3	May 2	May 9	.....	.....	May 3	May 6	.....	May 4	May 2	Apr. 29	May 11
May 7	May 5	May 8	May 13	May 5	May 8	May 7	May 5	Apr. 29	May 12	May 3	May 3	May 1	May 6	May 6	May 3	Apr. 29	May 5	Apr. 30
Apr. 19	Apr. 1	.....	Apr. 25	Mar. 23	Mar. 19	Mar. 26	Mar. 26	Apr. 1	Mar. 24	Mar. 25	Mar. 28	Mar. 28	Mar. 16	Mar. 28	Mar. 25	Apr. 3	Apr. 9	Apr. 14
Mar. 27	Mar. 31	Apr. 13	Apr. 18	Mar. 1	Mar. 6	Mar. 17	Mar. 17	Feb. 24	Mar. 17	Mar. 16	Mar. 21	Mar. 11	Mar. 7	Mar. 6	Mar. 17	Feb. 24	Apr. 12	May 5
Mar. 27	Mar. 1	Mar. 25	Mar. 20	Mar. 12	Mar. 8	Mar. 2	Mar. 18	Mar. 28	aMar. 17	Mar. 17	Mar. 22	Mar. 16	Mar. 12	Mar. 29	Mar. 18	Mar. 31	Apr. 2	Mar. 17
May 8	May 7	May 1	May 1	May 2	May 4	Apr. 25	May 3	May 1	May 12	May 3	Apr. 28	May 6	Apr. 30	Apr. 29	May 2	May 1	Apr. 29	May 9
Apr. 19	.....	.....	.....	Apr. 6	.....	Mar. 30	Apr. 1	Apr. 5	Mar. 23	.....	Apr. 6	.....	.....	Apr. 12	.....	Apr. 4	.....	.....
Apr. 11	Apr. 21	Mar. 23	Mar. 20	Mar. 1	Feb. 28	Mar. 18	Mar. 18	Feb. 26	Mar. 17	Mar. 18	Mar. 23	Mar. 12	Mar. 5	Mar. 12	Mar. 17	Feb. 26	Mar. 30	Mar. 17
May 2	Apr. 16	Apr. 5	Apr. 18	Apr. 5	Mar. 17	Mar. 4	Apr. 1	Apr. 1	Mar. 18	Apr. 17	Mar. 19	Mar. 28	.....	Apr. 4	Apr. 7	Apr. 1	May 9	Mar. 29
Apr. 18	Mar. 18	Apr. 5	.....	Mar. 26	Mar. 18	Mar. 27	Mar. 27	Apr. 1	Mar. 24	Apr. 11	Mar. 28	Mar. 28	Apr. 2	Apr. 6	Mar. 31	Apr. 4	Apr. 23	Apr. 4
.....	.....	.....	.....	Mar. 29	Mar. 29	Apr. 14	Mar. 26	Apr. 4	Mar. 29	Apr. 22	Apr. 9	Mar. 31	.....	Apr. 3	Mar. 26	Apr. 4	.....	.....
May 17	.....	Apr. 29	May 7	Apr. 27	Apr. 30	May 5	May 3	May 2	May 11	.....	Apr. 29	.....	May 14	May 12	May 4	May 2	May 6	May 8
Apr. 18	.....	Apr. 29	May 9	Apr. 20	Apr. 18	Apr. 22	Apr. 24	Apr. 14	Apr. 25	Apr. 24	Apr. 21	Apr. 20	May 1	Apr. 17	Apr. 23	Apr. 14	Apr. 14	May 5
.....	Apr. 18	Apr. 3	Apr. 18	Mar. 30	Apr. 8	Apr. 5	Mar. 27	Apr. 13	Mar. 29	Apr. 17	Apr. 13	Apr. 16	Apr. 14	Apr. 15	Mar. 31	Apr. 13	Apr. 14	Apr. 12
Apr. 18	Apr. 20	.....	.....	Mar. 30	Mar. 21	Apr. 1	Mar. 28	Apr. 1	Mar. 31	Apr. 21	.....	Apr. 7	.....	Apr. 9	Apr. 1	Apr. 10	.....	.....
Res....	Mar. 24	Mar. 17	Apr. 5	Res....	Res....	Res....	Res....	Res....	Res.....	Mar. 19	Mar. 17	Mar. 11	Mar. 3	Res....	Res.....	Res.....	Mar. 30	Mar. 18
Apr. 13	.....	.....	Apr. 11	Apr. 5	Mar. 21	Apr. 6	Mar. 29	Apr. 5	Mar. 17	.....	Apr. 8	.....	Apr. 4	.....	Apr. 1	Apr. 5	.....	.....
Apr. 18	Apr. 20	Apr. 27	.....	Apr. 22	Apr. 29	May 2	Apr. 29	Apr. 15	Apr. 30	.....	Apr. 14	.....	Apr. 20	.....	.....	Apr. 15	.....	.....
May 10	May 27	May 14	May 13	May 3	May 10	Apr. 24	May 3	May 8	May 6	.....	May 7	.....	May 12	May 6	May 4	May 12	.....	May 16
.....	May 10	May 14	May 13	May 4	May 12	May 8	May 9	May 8	May 16	.....	.....	May 10	.....	May 14	May 13	May 12	May 17	.....
May 8	May 7	May 7	May 9	May 2	May 9	May 4	May 3	May 12	May 14	May 7	May 5	May 11	May 2	May 4	May 3	May 12	.....	.....
.....	May 16	Apr. 13	Apr. 5	Apr. 17	.....	Apr. 17	Apr. 13	Apr. 13	Apr. 14	Apr. 20	Apr. 13	Apr. 21	Apr. 20	Apr. 19	Apr. 13	Apr. 13	.....	.....
Apr. 24	May 10	.....	Apr. 11	Apr. 26	.....	Apr. 30	May 6	May 5	Apr. 24	.....	Apr. 18	.....	May 1	Apr. 23	Apr. 30	May 5	.....	.....
Apr. 25	May 7	Apr. 22	Apr. 9	Apr. 18	Apr. 20	Apr. 5	Apr. 12	Apr. 20	Apr. 20	Apr. 19	Apr. 14	.....	Apr. 17	Apr. 14	Apr. 12	Apr. 20	Apr. 27	Apr. 18
Apr. 9	.....	.....	Apr. 18	Mar. 27	Apr....	Apr. 3	Apr. 12	Apr. 8	Apr. 6	Apr. 2	Apr. 2	Mar. 31	.....	Apr. 11	Apr. 11	Apr. 8	.....	.....
Apr. 25	May 8	May 7	May 3	Apr. 26	Apr. 19	Apr. 24	Apr. 27	Apr. 24	Apr. 28	.....	Apr. 28	.....	Apr. 18	.....	Apr. 27	Apr. 30	May 11	May 25
May 12	May 10	May 3	May 9	May 5	May 6	May 7	May 3	May 10	May 15	.....	May 9	.....	May 12	May 18	May 12	May 13	May 14	.....
May 14	.....	Apr. 29	.....	Apr. 30	May 7	May 4	May 3	May 1	May 14	.....	Apr. 29	May 1	May 5	Apr. 29	Apr. 30	May 1	May 4	May 9
May 4	May 7	May 7	May 13	May 3	May 10	May 7	May 3	Apr. 30	May 13	May 3	Apr. 29	.....	May 9	May 6	May 4	Apr. 30	.....	.....
Apr. 28	Apr. 30	Apr. 30	Apr. 18	Apr. 26	Apr. 27	Apr. 23	Apr. 26	Apr. 28	Apr. 30	Apr. 26	.....	May 1	May 6	.....	Apr. 29	Apr. 29	May 19	.....
.....	.....	.....	.....	May 3	May 5	May 3	May 3	Apr. 29	May 13	May 3	.....	May 3	May 7	May 5	Apr. 29	Apr. 29	.....	.....
Apr. 19	.....	May 3	May 16	Apr. 26	May 3	May 5	May 3	May 1	May 9	May 4	.....	May 6	May 5	.....	May 6	May 5	.....	.....
Apr. 30	Apr. 29	Apr. 30	May 3	Apr. 29	Apr. 30	May 4	Apr. 29	Apr. 28	May 12	Apr. 30	Apr. 19	May 2	May 3	May 29	Apr. 30	Apr. 29	May 6	May 6
May 7	May 7	May 3	May 16	Apr. 26	May 3	May 3	Apr. 26	Apr. 29	May 6	May 3	May 1	May 15	.....	May 6	May 2	Apr. 29	May 5	May 9
wr....	Apr. 15	May 3	Apr. 25	Apr. 26	Apr. 29	Apr. 23	Apr. 22	Apr. 26	Apr. 23	.....	Apr. 27	.....	May 7	May 1	Apr. 24	Apr. 29	Apr. 22	May 5
May 15	May 7	May 3	.....	May 3	May 5	May 7	May 3	May 12	May 13	May 12	.....	May 12	May 11	May 15	May 3	May 12	May 19	May 14
May 12	May 7	May 3	May 13	May 3	May 10	May 7	May 3	May 10	May 14	.....	May 12	.....	May 7	May 17	May 4	May 12	.....	.....
May 14	May 9	May 3	May 16	May 7	May 12	May 8	May 5	May 12	May 13	.....	May 14	May 19	.....	May 17	May 12	May 12	May 19	.....
May 14	May 26	.....	May 27	May 16	May 17	May 20	May 5	May 12	May 16	.....	May 13	.....	.....	May 18	May 14	May 12	May 20	.....
May 7	May 7	May 3	May 16	Apr. 26	May 2	May 5	May 3	Apr. 30	May 9	.....	May 5	.....	May 10	May 10	May 3	Apr. 30	.....	.....
Apr. 19	May 7	May 3	.....	May 2	May 3	May 3	Apr. 28	Apr. 28	May 5	.....	.....	.....	May 8	.....	May 2	May 3	.....	.....
Apr. 30	Apr. 27	.....	.....	May 3	Apr. 29	May 9	May 3	May 12	May 13	Apr. 25	.....	.....	May 1	.....	May 3	May 13	.....	.....
May 4	May 10	May 3	May 3	May 2	May 3	May 3	Apr. 30	Apr. 30	May 2	May 2	May 2	May 10	May 8	May 7	May 3	Apr. 30	May 10	May 9
May 8	.....	.....	.....	Apr. 22	May 5	May 2	Apr. 29	Apr. 29	May 6	.....	May 4	.....	May 1	Apr. 25	May 7	Apr. 30	.....	.....
May 22	May 9	May 7	May 16	May 3	May 12	May 14	May 4	May 12	May 14	.....	May 9	May 12	.....	May 17	May 18	May 12	.....	.....
May 4	May 9	May 3	.....	May 3	May 10	May 7	May 3	May 12	May 12	.....	May 7	.....	May 8	May 13	May 4	May 12	.....	May 12
May 17	.....	.....	May 23	May 3	May 10	May 8	May 7	May 12	May 12	.....	.....	.....	.....	.....	May 12	May 12	.....	.....
May 12	May 7	May 3	.....	May 2	May 7	May 2	Apr. 30	May 2	May 9	May 4	May 3	May 10	May 9	May 17	May 6	May 2	.....	May 2
May 9	.....	.....	.....	May 4	May 4	May 4	.....	May 6	.....	.....	.....	.....	.....	.....	May 6	May 6	.....	.....
May 2	Apr. 25	.....	.....	Apr. 29	May 5	May 6	May 3	May 4	May 5	.....	May 4	May 11	May 10	May 6	May 6	May 5	May 27	May 16
.....	Apr. 25	Apr. 29	.....	Apr. 27	May 2	May 1	Apr. 27	Apr. 17	May 1	.....	May 1	.....	May 6	May 1	.....	Apr. 20	.....	.....
.....	Apr. 28	Apr. 28	May 3	May 2	May 3	May 4	Apr. 30	May 2	May 5	.....	May 2	.....	.....	.....	.....	May 3	.....	May 12
Apr. 9	.....	.....	.....	Apr. 20	Apr. 5	Mar. 28	Apr. 1	Apr. 13	Mar. 20	.....	Apr. 13	.....	Apr. 18	.....	Apr. 25	Apr. 13	.....	.....
Apr. 21	.....	Apr. 29	Apr. 5	Apr. 18	Apr. 19	Apr. 17	Apr. 5	Apr. 14	Apr. 11	Apr. 24	Apr. 13	Apr. 17	Apr. 12	Apr. 18	Apr. 22	Apr. 14	.....	May 6
.....	May 5	Apr. 29	May 9	Apr. 26	May 5	May 4	Apr. 25	Apr. 29	May 1	.....	May 3	May 11	May 5	May 13	May 3	May 4	.....	.....
May 10	May 3	Apr. 28	May 13	May 3	May 2	May 3	Apr. 25	May 6	May 1	.....	May 4	May 3	.....	May 4	May 3	May 7	May 17	.....
May 17	May 7	.....	.....	May 3	May 10	May 5	May 3	May 12	May 9	.....	.....	.....	May 6	May 12	May 7	May 12	.....	.....
Apr. 24	.....	Apr. 20	Apr. 18	Apr. 16	Apr. 11	Apr. 6	Mar. 29	Apr. 12	Apr. 3	Apr. 15	Apr. 10	.....	May 2	Apr. 23	Apr. 10	Apr. 12	.....	.....
Mar....	Mar. 21	Mar. 10	Mar. 8	Feb. 28	Feb. 26	Mar. 14	Mar. 13	Feb. 24	Mar. 12	Mar. 15	Mar. 18	Mar. 6	Mar. 3	Mar. 1	Mar. 8	Feb. 24	Mar. 25	Mar. 16
Mar. 24	Mar. 30	Mar. 17	Mar. 20	Mar. 1	Mar. 3	Mar. 8	Mar. 15	Feb. 24	Mar. 12	Mar. 28	Mar. 28	Mar. 11	Mar. 7	Mar. 6	Mar. 17	Feb. 24	Mar. 26	Mar. 24

SPRING MIGRATION: ARRIVALS

90 Transients commonly reported	Cincinnatus		Alfred			Ithaca				
	1905	1906	1900	1905	1906	1903	1904	1905	1906	1907
Horned grebe	...	...	...	...	...	...	...	aApr. 21	May 5	Apr. 26
Pied-billed grebe	...	...	...	...	...	...	...	Apr. 1	...	Apr. 26
Canada goose	...	...	...	...	...	...	Mar. 13	Mar. 22	Feb. 27	Mar. 18
American bittern	...	Apr. 20	...	...	...	...	May 12	Apr. 8	Apr. 20	Apr. 26
Great blue heron	...	...	...	...	...	...	...	Mar. 30	Mar. 30	Apr. 13
Green heron	...	...	...	...	...	...	...	Apr. 26	Apr. 18	May 3
Sora	...	...	...	...	...	May 8	...	May 18	Apr. 26	May 4
American woodcock	...	...	...	Apr. 5	...	...	...	Mar. 31	July 22	...
Wilson snipe	...	...	...	...	...	...	...	Apr. 12	Apr. 20	Mar. 17
Greater yellow legs	...	...	...	...	...	...	...	May 7	Apr. 29	...
Solitary sandpiper	May 16	May 2	...	...	...	May 7	May 1	Apr. 28	Apr. 20	May 2
Spotted sandpiper	...	...	...	May 5	...	May 10	Apr. 25	Apr. 21	Apr. 20	Apr. 29
Killdeer	...	...	...	...	...	...	...	Mar. 12	Apr. 3	Mar. 17
Mourning dove	...	...	...	...	...	...	...	Mar. 18	May 23	Apr. 24
Marsh hawk	...	...	...	...	...	...	...	Mar. 29	June 29	Mar. 29
Sparrow hawk	...	...	...	...	...	...	...	Mar. 16	...	Jan. 20
Osprey	...	...	...	...	...	...	Apr. 23	Apr. 16	Apr. 5	Apr. 13
Black-billed cuckoo	...	...	May 11	...	May 23	...	...	May 6	May 13	May 16
Belted kingfisher	...	Apr. 13	Apr. 21	Mar. 31	Apr. 7	Apr. 3	...	Mar. 29	Mar. 30	Mar. 17
Yellow-bellied sapsucker	Apr. 27	Apr. 19	Apr. 16	...	Apr. 14	Apr. 3	Apr. 13	Mar. 31	Apr. 13	Apr. 6
Red-headed woodpecker	...	...	May 11	May 6	May 17	May 7	...	May 6	May 2	May 2
Northern flicker	...	Apr. 14	Apr. 8	Mar. 29	Apr. 14	Mar. 23	...	Apr. 2	Apr. 13	Jan. 11
Whip-poor-will	...	...	...	...	...	...	...	May 1	Apr. 29	May 14
Nighthawk	...	...	...	...	May 18	May 22	June 10	May 13	May 15	May 17
Chimney swift	Apr. 28	May 1	Apr. 29	May 1	Apr. 30	...	Apr. 25	Apr. 21	Apr. 20	Apr. 30
Ruby-throat. hummingbird	...	...	May 14	May 13	May 15	...	...	May 5	May 12	May 18
Kingbird	...	May 7	May 2	May 12	May 17	May 6	...	May 3	May 6	May 7
Crested flycatcher	May 12	...	May 11	May 6	May 17	May 8	May 6	May 2	May 5	May 14
Phoebe	Mar. 26	Apr. 17	Apr. 12	Mar. 26	Apr. 3	Mar. 19	...	Mar. 19	Apr. 3	Mar. 22
Wood pewee	...	...	May 14	May 13	May 19	...	May 10	May 3	May 12	May 2
Least flycatcher	...	...	May 2	May 3	May 5	May 5	May 3	Apr. 30	May 1	May 2
Bobolink	...	May 2	May 8	Apr. 25	May 4	May 12	May 1	May 3	May 4	May 5
Cowbird	Mar. 29	...	Apr. 2	Mar. 26	Apr. 22	Mar. 18	...	Mar. 19	Apr. 4	Mar. 17
Red-winged blackbird	...	...	Mar. 25	Mar. 15	Apr. 5	Mar. 13	Mar. 14	Mar. 16	Feb. 24	Mar. 17
Meadowlark	...	Mar. 13	Apr. 1	Mar. 19	Apr. 4	Mar. 14	...	Mar. 18	Mar. 4	Mar. 17
Baltimore oriole	May 1	May 5	May 3	May 4	May 3	May 5	May 6	Apr. 30	May 1	May 7
Rusty blackbird	...	...	...	...	...	...	Apr. 18	Apr. 1	Apr. 14	Mar. 26
Crow blackbird	Mar. 26	Apr. 3	Mar. 25	Mar. 18	Apr. 3	Mar. 13	...	Mar. 12	Mar. [illegible]	Feb. 4
Purple finch	...	Apr. 12	Mar. 29	Mar. 24	Apr. 3	Mar. 27	Apr. 18	Mar. 18	Mar. 11	Feb. 19
Vesper sparrow	Mar. 29	Apr. 12	Apr. 5	Mar. 26	Apr. 3	Mar. 23	...	Mar. 26	Apr. 1	Mar. 29
Savannah sparrow	...	...	Apr. 22	Apr. 4	Apr. 12	...	...	Mar. 23	Apr. 6	Mar. 29
White-crowned sparrow	...	May 6	May 9	...	May 8	May 3	May 11	May 4	Feb. 24	May 2
White-throated sparrow	Apr. 28	May 14	May 4	Apr. 27	Apr. 21	May 1	Apr. 15	Apr. 19	Apr. 15	Apr. 27
Chipping sparrow	...	Apr. 19	Apr. 12	Mar. 31	Apr. 13	Mar. 31	...	Mar. 29	Apr. 11	Mar. 27
Field sparrow	...	Apr. 14	Apr. 18	Mar. 29	Apr. 15	Mar. 27	...	Mar. 28	Apr. 13	Mar. 25
Song sparrow	...	Mar. 5	Mar. 23	Mar. 16	Feb. 27	Res.	Res.	Res.	...	Jan. 1
Fox sparrow	...	...	...	...	...	...	...	Mar. 26	Apr. 13	Mar. 17
Towhee	...	May 1	May 7	Apr. 25	Apr. 16	May 1	May 3	Apr. 18	Apr. 29	Apr. 27
Rose-breasted grosbeak	...	May 14	May 7	May 13	...	...	May 16	May 3	May 2	May 5
Indigo bird	May 12	...	May 13	...	May 19	May 22	May 21	May 9	May 13	May 15
Scarlet tanager	...	May 14	May 13	May 5	May 19	...	May 11	May 3	May 6	May 14
Purple martin	...	...	...	...	...	...	...	May 1	June 3	...
Cliff swallow	Apr. 27	...	May 13	May 3	Apr. 31	...	...	Apr. 20	Apr. 27	May 16
Barn swallow	...	Apr. 27	Apr. 24	Apr. 23	Apr. 31	Apr. 15	Apr. 17	Apr. 13	Apr. 14	Apr. 26
Tree swallow	...	...	...	...	...	...	...	Mar. 30	Apr. 5	Mar. 23
Bank swallow	...	...	...	...	...	May 1	Apr. 30	Apr. 27	Apr. 14	Apr. 30
Red-eyed vireo	...	...	May 6	...	May 11	May 5	May 8	May 6	Apr. 30	May 13
Warbling vireo	May 3	May 8	May 3	May 3	May 8	May 1	May 4	Apr. 30	Apr. 30	Apr. 30
Yellow-throated vireo	...	...	May 4	May 6	May 11	May 7	May 5	Apr. 30	Apr. 30	May 2
Black and white warbler	...	...	May 4	May 3	May 8	Apr. 30	May 5	Apr. 26	Apr. 29	May 1
Nashville warbler	...	...	May 7	May 5	May 6	May 1	May 10	May 4	Apr. 30	May 2
Parula warbler	...	May 4	May 4	May 7	May 17	May 5	May 7	Apr. 30	Apr. 30	May 2
Yellow warbler	...	...	Apr. 30	May 3	May 1	Apr. 24	May 2	Apr. 29	Apr. 28	Apr. 30
Black-throat. blue warbler	...	...	May 25	May 5	May 13	May 3	May 9	Apr. 29	May 2	May 5
Myrtle warbler	Apr. 27	May 2	...	May 5	...	Apr. 20	Apr. 14	Apr. 21	Apr. 17	Apr. 24
Magnolia warbler	...	...	...	May 5	May 17	May 9	May 10	Apr. 29	May 2	Apr. 30
Chestnut-sided warbler	...	May 8	May 4	May 3	...	...	May 7	May 3	May 6	May 5
Bay-breasted warbler	...	...	...	...	...	...	May 11	May 7	May 13	May 16
Black-poll warbler	May 17	May 22	May 16	...	...	...	May 16	May 10	May 15	May 23
Blackburnian warbler	...	May 4	May 4	May 5	May 16	May 7	May 6	May 3	May 1	May 7
Black-throat. green warbler	...	May 4	May 6	May 5	May 6	Apr. 30	May 5	Apr. 30	Apr. 30	May 1
Palm warbler	...	...	...	...	...	May 1	...	May 3	May 4	May 5
Ovenbird	...	...	May 3	May 5	May 6	May 7	May 7	Apr. 29	May 3	May 5
Water-thrush	May 16	...	...	...	...	...	Apr. 30	May 3	Apr. 28	May 1
Mourning warbler	...	...	...	...	...	...	May 13	May 7	June 24	May 13
Northern yellow-throat	...	...	May 4	May 6	...	May 7	May 7	Apr. 30	May 4	May 2
Canadian warbler	...	May 14	May 4	May 6	May 17	...	May 13	May 5	May 6	May 15
American redstart	...	...	May 4	May 6	May 7	May 5	May 3	Apr. 29	Apr. 29	Apr. 30
American pipit	...	...	...	...	...	...	...	Apr. 1	Apr. 14	Apr. 4
Catbird	...	May 6	May 4	May 8	May 8	May 7	May 5	May 3	May 2	May 2
Brown thrasher	...	...	...	...	...	...	...	Apr. 29	Apr. 29	May 3
House wren	...	...	May 4	Apr. 27	May 3	...	May 4	Apr. 26	Apr. 26	May 2
Winter wren	...	...	...	...	...	aApr. 7	aMar. 28	Apr. 5	Feb. 11	Mar. 24
Ruby-crowned kinglet	...	...	Apr. 10	Apr. 22	Apr. 27	Apr. 19	Apr. 21	Apr. 20	Apr. 14	Apr. 12
Wood thrush	...	...	May 11	May 8	May 17	...	May 11	May 6	May 4	May 5
Wilson thrush	...	May 14	...	May 7	...	May 8	May 2	Apr. 29	May 1	Apr. 30
Olive-backed thrush	...	...	...	...	...	...	May 7	Apr. 29	May 5	May 10
Hermit thrush	Mar. 20	Apr. 14	Apr. 20	Apr. 27	...	...	...	Mar. 26	Apr. 14	Apr. 7
American robin	Mar. 16	Mar. 30	Feb. 18	Mar. 10	Feb. 24	Mar. 4	aMar. 15	Mar. 12	Jan. 21	Mar. 16
Bluebird	Mar. 18	Apr. 2	Mar. 16	Mar. 17	Feb. 24	Mar. 6	...	Mar. 12	Feb. 24	Mar. 15

90 Transients commonly reported	Branchport								Erie, Pa.
	1900	1901	1902	1903	1904	1905	1906	1907	1900
Horned grebe	...	...	...	Apr. 5	Apr. 8	...	Apr. 7	...	Mar. 27
Pied-billed grebe	Apr. 26	...	...	...	...	...	Apr. 28	...	Apr. 16
Canada goose	Mar. 25	Mar. 13	Mar. 1	Mar. 7	Mar. 10	Mar. 18	aApr. 5	Mar. 17	Mar. 29
American bittern	May 2	...	...	...	...	...	Apr. 27	...	Apr. 17
Great blue heron	Apr. 6	Apr. 4	...	...	Mar. 25	Mar. 26	Mar. 29	Apr. 7	Apr. 12
Green heron	Apr. 21	May 8	...	May 3	...	Apr. 30	Apr. 18	...	Apr. 19
Sora	...	May 9	...	May 1	...	...	May 4	...	May 10
American woodcock	...	...	...	...	...	...	Apr. 5	...	...
Wilson snipe	Apr. 11	...	...	...	...	...	Apr. 3	...	...
Greater yellow legs	Apr. 28	Apr. 13	May 6	May 5	...	Apr. 21	Apr. 21	Apr. 27	Apr. 16
Solitary sandpiper	...	May 9	May 11	...	...	May 7	Apr. 30	May 11	May 3
Spotted sandpiper	Apr. 24	Apr. 21	Apr. 26	May 4	Apr. 29	Apr. 23	Apr. 15	Apr. 30	Apr. 18
Killdeer	Mar. 23	Mar. 12	Mar. 11	Mar. 5	Mar. 24	Mar. 17	Feb. 24	Mar. 17	Mar. 23
Mourning dove	Apr. 8	Mar. 24	Mar. 30	Mar. 15	Apr. 2	Mar. 27	Mar. 12	Mar. 21	Apr. 2
Marsh hawk	Apr. 10	...	...	...	...	Apr. 16	Apr. 29	Mar. 24	Apr. 10
Sparrow hawk	...	...	...	...	Apr. 1	Mar. 28	...	Mar. 24	...
Osprey	Apr. 10	Apr. 13	Mar. 28	...	Apr. 6	...	...	...	May 7
Black-billed cuckoo	May 20	...	...	...	...	May 16	...	...	May 30
Belted kingfisher	Apr. 18	Apr. 13	Mar. 28	Mar. 29	Apr. 2	Mar. 26	Apr. 3	Mar. 27	Apr. 7
Yellow-bellied sapsucker	...	...	...	...	...	Apr. 16	Apr. 15	...	Apr. 18
Red-headed woodpecker	Apr. 22	...	...	...	...	Apr. 9	...	...	Apr. 30
Northern flicker	Apr. 16	Apr. 7	Mar. 9	Mar. 10	Apr. 9	Mar. 28	Apr. 14	Mar. 24	Apr. 17
Whip-poor-will	May 9	May 7	...	May 8	May 8	Apr. 28	Apr. 30	May 13	May 1
Nighthawk	...	...	...	May 15	...	...	...	...	May 16
Chimney swift	Apr. 28	Apr. 18	Apr. 29	...	...	Apr. 26	Apr. 28	...	...
Ruby-throat. hummingbird	May 18	May...	May 13	May 15	May 10	May 16	May 15	May 13	May 21
Kingbird	May 1	May 2	...	...	May 6	May 3	May 2	Apr. 30	May 3
Crested flycatcher	May 6	May 8	Apr. 29	...	May 26	May 4	Apr. 30	...	May 3
Phoebe	Mar. 31	Mar. 24	Mar. 21	Mar. 18	Mar. 25	Mar. 27	Apr. 2	Mar. 22	Apr. 3
Wood pewee	May 14	May 18	May 11	May 15	May 15	May 10	May 12	May 19	May 14
Least flycatcher	May 2	May 2	May 3	Apr. 30	...	Apr. 30	May 1	May 13	May 5
Bobolink	May 6	May 6	May 6	...	May 5	May 4	May 1	May 5	May 7
Cowbird	Mar. 27	Mar. 15	Mar. 12	Mar. 15	Mar. 25	Mar. 17	Apr. 3	Mar. 17	Apr. 19
Red-winged blackbird	Mar. 23	Mar. 14	Mar. 1	Mar. 4	Mar. 9	Mar. 13	Feb. 23	Mar. 14	Mar. 27
Meadowlark	Mar. 22	Mar. 20	Mar. 14	Mar. 6	Res.	Mar. 16	Mar. 13	Mar. 17	Mar. 27
Baltimore oriole	May 1	May 5	Apr. 24	Apr. 30	May 5	Apr. 30	May 2	May 10	May 8
Rusty blackbird	...	Apr. 13	...	...	...	Apr. 24	Apr. 30	May 5	Apr. 19
Crow blackbird	Mar. 25	Mar. 14	Mar. 6	Mar. 12	Mar. 19	Mar. 16	Mar. 13	Mar. 17	Apr. 11
Purple finch	Mar. 29	Apr. 21	Mar. 21	Apr. 9	...	...	Apr. 1	Mar. 25	May 2
Vesper sparrow	Apr. 8	Mar. 24	Mar. 30	Mar. 18	Apr. 3	Mar. 28	Apr. 3	Mar. 25	Apr. 18
Savannah sparrow	...	...	...	...	...	...	...	...	...
White-crowned sparrow	May 6	...	...	...	May 15	Apr. 30	May 11	...	May 17
White-throated sparrow	May 6	Apr. 28	Apr. 26	May 8	May 7	Apr. 10	Apr. 17	Apr. 28	Apr. 18
Chipping sparrow	Apr. 19	Apr. 15	Apr. 6	...	Apr. 5	Mar. 31	Apr. 13	Apr. 12	...
Field sparrow	...	...	Apr. 27	...	...	Apr. 9	Apr. 9	...	Apr. 18
Song sparrow	...	Res.	Res.	Res.	Res.	Res.	Res.	Res.	Res.
Fox sparrow	...	...	...	Apr. 24	...	Mar. 15	Apr. 18	Mar. 24	Apr. 13
Towhee	Apr. 23	Apr. 27	Apr. 29	May 5	May 6	Apr. 23	Apr. 18	May 12	Apr. 18
Rose-breasted grosbeak	...	...	...	...	...	May 6	May 6	May 19	May 10
Indigo bird	May 20	...	...	...	May 10	May 11	May 10	May 18	...
Scarlet tanager	May 6	May 16	May 4	...	May 7	May 4	May 17	May 19	May 8
Purple martin	...	...	...	...	...	Apr. 20	...	...	...
Cliff swallow	...	...	...	...	...	Apr. 30	Apr. 18	...	Apr. 24
Barn swallow	Apr. 18	Apr. 13	Apr. 16	Apr. 16	Apr. 6	Apr. 4	Apr. 17	Apr. 25	Apr. 25
Tree swallow	Apr. 4	Apr. 9	Apr. 9	Apr. 3	Apr. 4	Mar. 27	Apr. 30	...	Apr. 9
Bank swallow	...	...	...	...	May 5	Apr. 30	...	Apr. 30	Apr. 25
Red-eyed vireo	May 5	May 12	...	Apr. 30	...	May 4	May 13	May 14	May 12
Warbling vireo	Apr. 29	May 6	Apr. 26	Apr. 30	May 5	Apr. 30	Apr. 30	May 13	May 14
Yellow-throated vireo	...	May 6	May 4	...	May 6	May 4	May 3	May 14	May 4
Black and white warbler	May 7	May 8	Apr. 29	May 3	Apr. 24	Apr. 30	May 1	May 3	Apr. 28
Nashville warbler	...	...	May 11	...	...	Apr. 30	Apr. 30	May 12	...
Parula warbler	...	...	...	May 4	...	May 9	May 3	May 14	Apr. 19
Yellow warbler	Apr. 28	Apr. 30	Apr. 24	Apr. 29	Apr. 29	Apr. 28	May 3	Apr. 30	Apr. 30
Black-throat. blue warbler	May 6	...	May 4	May 10	May 8	May 3	May 6	May 12	May 7
Myrtle warbler	May 6	May 1	Apr. 26	Apr. 29	May 8	Apr. 23	Apr. 10	May 1	wr.
Magnolia warbler	...	May 5	May 11	...	May 8	May 3	May 5	May 12	May 15
Chestnut-sided warbler	...	May 7	...	...	May 6	May 3	May 2	May 14	May 12
Bay-breasted warbler	...	...	May 11	...	May 8	May 12	May 13	...	May 14
Black-poll warbler	May 23	May 18	...	...	...	May 16	...	...	May 14
Blackburnian warbler	...	May 11	...	...	May 8	Apr. 30	May 6	May 14	May 7
Black-throat. green warbler	Apr. 29	...	May 4	...	May 6	Apr. 30	May 1	May 5	Apr. 19
Palm warbler	...	...	...	...	...	Apr. 30	May 3	...	Apr. 30
Ovenbird	May 6	May 7	...	May 5	May 6	Apr. 30	May 6	May 17	May 4
Water-thrush	...	...	...	...	May 1	Apr. 30	Apr. 10	Mar. 3	May 8
Mourning warbler	...	...	...	...	...	May 9	May 21	May 17	May 22
Northern yellow-throat	May 5	May 9	May 4	May 8	...	Apr. 30	May 1	May 12	May 4
Canadian warbler	...	...	...	...	May 8	May 6	May 5	May 14	May 17
American redstart	May 6	...	May 4	...	May 8	Apr. 30	Apr. 30	May 5	May 12
American pipit	...	...	...	...	...	May 9	...	May 11	May 9
Catbird	May 7	Apr. 30	May 6	...	May 6	May 3	May 6	Apr. 30	May 2
Brown thrasher	...	...	Apr. 26	...	...	May 3	Apr. 21	Apr. 28	...
House wren	...	...	...	...	...	...	...	...	...
Winter wren	...	...	...	Apr. 19	...	Mar. 26	Apr. 15	...	Apr. 9
Ruby-crowned kinglet	Apr. 19	Apr. 27	Apr. 10	Apr. 22	...	Apr. 16	Apr. 14	Apr. 28	Apr. 21
Wood thrush	May 6	...	Apr. 27	...	Apr. 24	Apr. 20	Apr. 15	...	...
Wilson thrush	Apr. 22	May 7	May 4	May 3	Apr. 29	Apr. 30	May 3	May 5	May 10
Olive-backed thrush	...	...	...	...	...	...	Apr. 12	May 19	May 17
Hermit thrush	...	Apr. 14	...	Apr. 12	...	Apr. 9	Apr. 9	Apr. 28	Apr. 24
American robin	Mar. 9	Mar. 14	Feb. 27	Mar. 2	May 4	May 6	Feb. 14	Mar. 7	Mar. ...
Bluebird	Mar. 23	Mar. 14	May 1	...	...	Mar. 17	Feb. 14	Mar. 16	Mar. 24

90 Transients commonly reported	Jamestown		Lockport	Rochester					
	1900	1906	1900	1902	1903	1904	1905	1906	1907
Horned grebe	...	...	...	Apr. 19	Mar. 18	Mar. 26	Apr. 1	Mar. 1	aApr. 1
Pied-billed grebe	...	...	...	May 3	Apr. 25	Mar. 23	Apr. 12	Apr. 10	Apr. 10
Canada goose	...	...	Mar. 5	Mar. 1	Mar. 21	Feb. 22	Mar. 26	Feb. 24	Mar. 14
American bittern	...	...	Apr. 5	Apr. 29	Apr. 19	Apr. 23	Apr. 12	Apr. 21	Apr. 21
Great blue heron	...	...	Mar. 20	Mar. 29	Mar. 21	Mar. 20	Mar. 29	Mar. 24	Mar. 30
Green heron	...	...	...	Apr. 24	May 3	May 21	May 4	May 1	Apr. 28
Sora	...	...	...	May 3	May 15	May 17	Apr. 12	May 5	May 6
American woodcock	...	...	...	...	...	Apr. 7	May 3	May 5	Apr. 29
Wilson snipe	...	...	May 1	...	Apr. 20	Apr. 1	Apr. 1	Apr. 10	Apr. 13
Greater yellow legs	...	...	...	...	Apr. 20	May 4	Apr. 12	Apr. 20	...
Solitary sandpiper	...	...	...	...	May 17	May 14	May 7	May 10	May 13
Spotted sandpiper	...	...	...	Apr. 26	Apr. 25	Apr. 30	Apr. 24	Apr. 20	Apr. 28
Killdeer	...	...	...	Mar. 12	Mar. 21	Mar. 12	Mar. 18	Apr. 1	Mar. 17
Mourning dove	...	...	Apr. 9	Mar. 21	Mar. 19	Mar. 26	Mar. 26	Apr. 2	Mar. 22
Marsh hawk	...	...	...	Mar. 23	Mar. 19	Mar. 30	Apr. 3	Apr. 1	Mar. 23
Sparrow hawk	...	...	...	Res.	Mar. 6	Mar. 31	Mar. 26	Res.	Mar. 25
Osprey	...	...	...	May 3	Apr. 30	Apr. 23	Mar. 28	Mar. 26	Apr. 25
Black-billed cuckoo	May 7	...	...	May 17	May 20	May 8	May 12	May 6	May 16
Belted kingfisher	...	...	...	Apr. 12	Apr. 3	Mar. 27	Mar. 29	Apr. 2	Mar. 31
Yellow-bellied sapsucker	...	Apr. 14	...	Apr. 15	Apr. 4	Apr. 8	Apr. 1	Apr. 8	Apr. 18
Red-headed woodpecker	Apr. 10	...	Apr. 18	Res.	May 7	Res.	May 5	May 4	Res.
Northern flicker	Apr. 15	...	Apr. 11	Mar. 22	Mar. 21	Mar. 31	Mar. 29	Apr. 7	Mar. 10
Whip-poor-will	...	...	...	Apr. 29	May 2	May 3	May 4	May 13	May 14
Nighthawk	May 10	...	May 27	May 11	May 15	May 8	May 3	May 10	May 14
Chimney swift	May 15	Apr. 24	Apr. 11	Apr. 26	Apr. 30	Apr. 23	Apr. 27	Apr. 23	May 11
Ruby-throat. hummingbird	May 11	May 10	May 13	May 5	May 14	May 5	May 3	May 10	May 14
Kingbird	Apr. 28	...	May 4	May 3	May 8	May 1	May 3	May 3	May 12
Crested flycatcher	May 28	...	May 9	Apr. 29	May 2	May 5	May 3	May 2	May 13
Phoebe	Apr. 16	...	...	Mar. 26	Mar. 20	Mar. 25	Mar. 26	Apr. 3	Mar. 17
Wood pewee	May 7	May 15	May 13	May 6	May 14	May 8	May 9	May 16	May 15
Least flycatcher	May 3	May 4	May 7	Apr. 27	May 8	May 4	May 3	May 2	May 9
Bobolink	May 5	May 8	May 13	May 5	May 8	May 7	May 5	Apr. 29	May 12
Cowbird	Apr. 1	...	Apr. 25	Mar. 23	Mar. 10	Mar. 26	Mar. 26	Apr. 1	Mar. 24
Red-winged blackbird	Mar. 31	Apr. 13	Apr. 18	Mar. 1	Mar. 6	Mar. 17	Mar. 17	Feb. 24	Mar. 17
Meadowlark	Mar. 1	Mar. 25	Mar. 20	Mar. 12	Mar. 8	Mar. 2	Mar. 18	Mar. 28	aMar. 17
Baltimore oriole	May 7	May 1	May 1	May 2	May 4	Apr. 25	May 3	May 1	May 12
Rusty blackbird	...	...	...	Apr. 6	...	Mar. 30	Apr. 1	Apr. 5	Mar. 23
Crow blackbird	Apr. 21	Mar. 23	Mar. 20	Mar. 1	Feb. 28	Mar. 18	Mar. 18	Feb. 26	Mar. 17
Purple finch	Apr. 16	Apr. 5	Apr. 18	Apr. 5	Mar. 17	Mar. 4	Apr. 1	Apr. 1	Mar. 18
Vesper sparrow	Mar. 18	Apr. 5	...	Mar. 26	Mar. 18	Mar. 27	Mar. 27	Apr. 1	Mar. 24
Savannah sparrow	...	...	...	Mar. 29	Mar. 29	Apr. 14	Mar. 26	Apr. 4	Mar. 20
White-crowned sparrow	...	Apr. 29	May 7	Apr. 27	Apr. 30	May 5	May 3	May 2	May 11
White-throated sparrow	...	Apr. 29	May 9	Apr. 20	Apr. 18	Apr. 22	Apr. 24	Apr. 14	Apr. 25
Chipping sparrow	Apr. 18	Apr. 3	Apr. 18	Mar. 30	Apr. 8	Apr. 5	Mar. 27	Apr. 13	Mar. 29
Field sparrow	Apr. 20	...	...	Mar. 30	Mar. 21	Apr. 1	Mar. 28	Apr. 1	Mar. 31
Song sparrow	Mar. 24	Mar. 17	Apr. 5	Res.	Res.	Res.	Res.	Res.	Res.
Fox sparrow	...	...	Apr. 11	Apr. 5	Mar. 21	Apr. 6	Mar. 29	Apr. 5	Mar. 17
Towhee	Apr. 20	Apr. 27	...	Apr. 22	Apr. 29	May 2	Apr. 29	Apr. 15	Apr. 30
Rose-breasted grosbeak	May 27	May 14	May 13	May 3	May 10	Apr. 24	May 3	May 8	May 6
Indigo bird	May 10	May 14	May 13	May 4	May 12	May 8	May 9	May 8	May 16
Scarlet tanager	May 7	May 7	May 9	May 2	May 9	May 4	May 3	May 12	May 14
Purple martin	May 16	Apr. 13	Apr. 5	Apr. 17	...	Apr. 17	Apr. 13	Apr. 13	Apr. 14
Cliff swallow	May 10	...	Apr. 11	Apr. 26	...	Apr. 30	May 6	May 5	Apr. 24
Barn swallow	May 7	Apr. 22	Apr. 9	Apr. 18	Apr. 20	Apr. 5	Apr. 12	Apr. 20	Apr. 20
Tree swallow	...	...	Apr. 18	Mar. 27	Apr. ...	Apr. 3	Apr. 12	Apr. 8	Apr. 6
Bank swallow	May 8	May 7	May 3	Apr. 26	Apr. 19	Apr. 24	Apr. 27	Apr. 24	Apr. 28
Red-eyed vireo	May 10	May 3	May 9	May 5	May 6	May 7	May 3	May 10	May 15
Warbling vireo	...	Apr. 29	...	Apr. 30	May 7	May 4	May 3	May 1	May 14
Yellow-throated vireo	May 7	May 7	May 13	May 3	May 10	May 7	May 3	Apr. 30	May 13
Black and white warbler	Apr. 30	Apr. 30	Apr. 18	Apr. 26	Apr. 27	Apr. 23	Apr. 26	Apr. 28	Apr. 30
Nashville warbler	...	...	...	May 3	May 5	May 3	May 3	Apr. 29	May 13
Parula warbler	...	May 3	May 16	Apr. 26	May 3	May 5	May 3	May 1	May 9
Yellow warbler	Apr. 29	Apr. 30	May 3	Apr. 29	Apr. 30	May 4	Apr. 29	Apr. 28	May 12
Black-throat. blue warbler	May 7	May 3	May 16	Apr. 26	May 3	May 3	Apr. 26	Apr. 29	May 6
Myrtle warbler	Apr. 15	May 3	Apr. 25	Apr. 26	Apr. 29	Apr. 23	Apr. 22	Apr 26	Apr. 23
Magnolia warbler	May 7	May 3	...	May 3	May 5	May 7	May 3	May 12	May 13
Chestnut-sided warbler	May 7	May 3	May 13	May 3	May 10	May 7	May 3	May 10	May 14
Bay-breasted warbler	May 9	May 3	May 16	May 7	May 12	May 8	May 5	May 12	May 13
Black-poll warbler	May 26	...	May 27	May 16	May 17	May 20	May 5	May 12	May 16
Blackburnian warbler	May 7	May 3	May 16	Apr. 26	May 2	May 5	May 3	Apr. 30	May 9
Black-throat. green warbler	May 7	May 3	...	May 2	May 3	May 3	Apr. 28	Apr. 28	May 5
Palm warbler	Apr. 27	...	...	May 3	Apr. 29	May 9	May 3	May 12	May 13
Ovenbird	May 10	May 3	May 3	May 2	May 3	May 3	Apr. 30	Apr. 30	May 2
Water-thrush	...	...	...	Apr. 22	May 5	May 2	Apr. 29	Apr. 29	May 6
Mourning warbler	May 9	May 7	May 16	May 3	May 12	May 14	May 4	May 12	May 14
Northern yellow-throat	May 9	May 3	...	May 3	May 10	May 7	May 3	May 12	May 12
Canadian warbler	...	...	May 23	May 3	May 10	May 8	May 7	May 12	May 12
American redstart	May 7	May 3	...	May 2	May 7	May 2	Apr. 30	May 2	May 9
American pipit	...	...	...	May 4	May 4	May 4	...	May 6	...
Catbird	Apr. 25	...	...	Apr 20	May 5	May 6	May 3	May 4	May 5
Brown thrasher	Apr. 25	Apr. 29	...	Apr. 27	May 2	May 1	Apr. 27	Apr. 17	May 1
House wren	Apr. 28	Apr. 28	May 3	May 2	May 3	May 4	Apr. 30	May 2	May 5
Winter wren	...	...	...	Apr. 20	Apr. 5	Mar. 28	Apr. 1	Apr. 13	Mar. 20
Ruby-crowned kinglet	...	Apr. 20	Apr. 5	Apr. 18	Apr. 19	Apr. 17	Apr. 5	Apr. 14	Apr. 11
Wood thrush	May 5	Apr. 20	May 9	Apr. 26	May 5	May 4	Apr. 25	Apr. 29	May 1
Wilson thrush	May 3	Apr. 28	May 13	May 3	May 2	May 3	Apr. 25	May 6	May 1
Olive-backed thrush	May 7	...	...	May 3	May 10	May 5	May 3	May 12	May 9
Hermit thrush	...	Apr. 20	Apr. 18	Apr. 16	Apr. 11	Apr. 6	Mar. 29	Apr. 12	Apr. 3
American robin	Mar. 21	Mar. 10	Mar. 8	Feb. 28	Feb. 26	Mar. 14	Mar. 13	Feb. 24	Mar. 12
Bluebird	Mar. 30	Mar. 17	Mar. 20	Mar. 1	Mar. 3	Mar. 8	Mar 15	Feb. 24	Mar. 12

90 Transients commonly reported	Canandaigua							Geneva	
	1895	1896	1897	1898	1899	1905	1906	1896	1897
Horned grebe	Apr. 12	Apr. 8	Mar. 23	Apr. 3	Mar. 27	Apr. 1	Apr. 14	...	...
Pied-billed grebe	...	...	Apr. 1	...	...	Apr. 12	Apr. 10	...	...
Canada goose	Mar. 15	...	...	...	...	Mar. 18	aFeb. 24	...	...
American bittern	Apr. 20	Apr. 21	Apr. 17	Apr. 12	Apr. 24	Apr. 14	Apr. 21	...	...
Great blue heron	Mar. 28	Mar. 26	Mar. 28	Mar. 31	Mar. 29	...	Mar. 24	May 5	...
Green heron	...	May 6	...	...	May 10	May 13	May 1	May 30	...
Sora	May 3	...	...	...	Apr. 27	Apr. 27	May 5	...	...
American woodcock	...	...	...	...	...	...	...	...	...
Wilson snipe	...	Apr. 15	...	Mar. 20	Apr. 10	Mar. 31	Apr. 10	...	...
Greater yellow legs	Apr. 25	Apr. 21	...	Apr. 16	Apr. 26	Apr. 14	Apr. 20	...	...
Solitary sandpiper	Apr. 29	May 2	...	...	May 1	May 13	May 11	...	...
Spotted sandpiper	Apr. 27	Apr. 14	Apr. 13	Apr. 17	Apr. 16	May 3	Apr. 20	May 5	May 9
Killdeer	Apr. 6	Mar. 27	Mar. 20	Mar. 12	...	Mar. 18	Apr. 1	Apr. 12	Apr. 15
Mourning dove	Mar. 19	Mar. 30	Mar. 12	Mar. 27	Mar. 30	Mar. 25	Apr. 2	Apr. 5	Mar. 24
Marsh hawk	...	...	...	...	...	...	...	...	...
Sparrow hawk	Res.	Apr. 1	...	...	Mar. 27	Mar. 31	Res.	...	...
Osprey	...	Apr. 12	...	Apr. 21	...	...	Mar. 26	...	...
Black-billed cuckoo	...	May 8	...	May 5	May 15	...	May 18	May 15	June 3
Belted kingfisher	Apr. 27	Apr. 9	Apr. 5	Mar. 11	Apr. 10	Mar. 31	Apr. 10	Apr. 16	May 2
Yellow-bellied sapsucker	Apr. 14	Apr. 13	...	Apr. 15	Apr. 6	Apr. 2	Apr. 13	Apr. 5	Apr. 4
Red-headed woodpecker	May 5	Res.	...	...	May 8	May 6	May 4	Apr. 5	...
Northern flicker	Apr. 11	Apr. 12	...	Mar. 26	Apr. 15	Apr. 1	Apr. 7	Apr. 19	Apr. 4
Whip-poor-will	...	May 2	...	...	May 1	...	May 13	...	...
Nighthawk	...	May 9	...	...	May 5	...	May 20	...	June 4
Chimney swift	Apr. 25	Apr. 19	Apr. 21	May 2	Apr. 20	Apr. 22	Apr. 24	Apr. 17	Apr. 24
Ruby-throat. hummingbird	May 6	...	May 11	May 10	May 8	May 13	May 13	May 3	May 24
Kingbird	Apr. 29	Apr. 20	...	May 8	May 2	May 6	May 5	May 10	May 9
Crested flycatcher	...	May 7	...	May 8	May 7	May 2	May 10	May 9	May 9
Phoebe	...	Apr. 8	Mar. 30	Mar 26	Apr. 10	Mar. 26	Apr. 4	Apr. 12	Apr. 4
Wood pewee	...	...	...	...	...	May 13	May 16	May 20	May 14
Least flycatcher	...	...	May 3	May 6	...	May 4	May 2	Apr. 29	May 11
Bobolink	May 3	May 3	May 1	May 6	May 6	May 3	Apr. 29	May 5	Apr. 10
Cowbird	Mar. 25	Mar. 28	Mar. 28	Mar. 16	Mar. 28	Mar. 25	Apr. 3	Apr. 9	Apr. 14
Red-winged blackbird	Mar. 16	Mar 21	Mar. 11	Mar. 7	Mar. 6	Mar. 17	Feb. 24	Apr. 12	May 5
Meadowlark	Mar. 17	Mar. 22	Mar. 16	Mar. 12	Mar. 29	Mar. 18	Mar. 31	Apr. 2	Mar. 17
Baltimore oriole	May 3	Apr. 28	May 6	Apr. 30	Apr. 29	May 2	May 1	Apr. 29	May 9
Rusty blackbird	...	Apr. 6	...	...	Apr. 12	...	Apr. 4	...	...
Crow blackbird	Mar. 18	Mar. 23	Mar. 12	Mar. 5	Mar. 12	Mar. 17	Feb. 26	Mar. 30	Mar. 17
Purple finch	Apr. 17	Mar. 10	Mar. 28	...	Apr. 4	Apr. 7	Apr. 1	May 9	Mar. 29
Vesper sparrow	Apr 11	Mar. 28	Mar. 28	Apr. 2	Apr. 6	Mar. 31	Apr. 4	Apr. 23	Apr. 4
Savannah sparrow	Apr 22	Apr. 9	Mar. 31	...	Apr. 3	Mar. 26	Apr 4	...	...
White-crowned sparrow	...	Apr. 29	...	May 14	May 12	May 4	May 2	May 6	May 8
White-throated sparrow	Apr. 24	Apr. 21	Apr. 20	May 1	Apr. 17	Apr. 23	Apr. 14	Apr. 14	May 5
Chipping sparrow	Apr 17	Apr. 13	Apr. 16	Apr. 14	Apr. 15	Mar. 31	Apr. 13	Apr. 14	Apr. 12
Field sparrow	Apr. 21	...	Apr. 7	...	Apr. 9	Apr. 1	Apr. 10	...	...
Song sparrow	Mar. 19	Mar. 17	Mar. 11	Mar. 3	Res.	Res.	Res.	Mar. 30	Mar. 18
Fox sparrow	...	Apr. 8	...	Apr. 4	...	Apr. 1	Apr 5	...	...
Towhee	...	Apr. 14	...	Apr. 20	...	...	Apr. 15	...	...
Rose-breasted grosbeak	...	May 7	...	May 12	May 6	May 4	May 12	...	May 16
Indigo bird	...	...	May 10	...	May 14	May 13	May 12	May 17	...
Scarlet tanager	May 7	May 5	May 11	May 2	May 4	May 3	May 12	...	...
Purple martin	Apr 20	Apr. 13	Apr. 21	Apr. 20	Apr. 19	Apr. 13	Apr. 13	...	...
Cliff swallow	...	Apr. 18	...	May 1	Apr. 23	Apr. 30	May 5	...	...
Barn swallow	Apr. 19	Apr. 14	...	Apr. 17	Apr. 14	Apr. 12	Apr. 20	Apr. 27	Apr. 18
Tree swallow	Apr. 2	Apr. 2	Mar. 31	...	Apr. 11	Apr. 11	Apr. 8	...	...
Bank swallow	...	Apr. 28	...	Apr. 18	...	Apr. 27	Apr. 30	May 11	May 25
Red-eyed vireo	...	May 9	...	May 12	May 18	May 12	May 13	May 14	...
Warbling vireo	...	Apr. 29	May 1	May 5	Apr. 29	Apr. 30	May 1	May 4	May 9
Yellow-throated vireo	May 3	Apr. 29	...	May 9	May 9	May 4	Apr. 30	...	...
Black and white warbler	Apr. 26	...	May 1	May 6	...	Apr. 29	Apr. 29	May 19	...
Nashville warbler	May 3	...	May 3	May 7	May 5	Apr. 29	Apr. 29	...	...
Parula warbler	May 4	...	May 6	May 5	...	May 6	May 5	...	...
Yellow warbler	Apr. 30	Apr. 19	May 2	May 3	May 29	Apr. 30	Apr. 29	May 6	May 6
Black-throat. blue warbler	May 3	May 1	May 15	...	May 6	May 2	Apr. 29	May 5	May 9
Myrtle warbler	...	Apr. 27	...	May 7	May 1	Apr. 24	Apr. 20	Apr. 22	May 5
Magnolia warbler	May 12	...	May 12	May 11	May 15	May 3	May 12	May 19	May 14
Chestnut-sided warbler	...	May 12	...	May 7	May 17	May 4	May 12	...	...
Bay-breasted warbler	...	May 14	May 19	...	May 17	May 12	May 12	May 10	...
Black-poll warbler	...	May 13	...	...	May 18	May 14	May 12	May 20	...
Blackburnian warbler	...	May 5	...	May 10	May 10	May 3	Apr. 30	...	...
Black-throat. green warbler	...	...	...	May 8	...	May 2	May 3	...	...
Palm warbler	Apr. 25	...	...	May 1	...	May 3	May 13	...	...
Ovenbird	May 2	May 2	May 10	May 8	May 7	May 3	Apr 30	May 10	May 9
Water-thrush	...	May 4	...	May 1	Apr. 25	May 7	Apr. 30	...	...
Mourning warbler	...	May 9	May 12	...	May 17	May 18	May 12	...	...
Northern yellow-throat	...	May 7	...	May 8	May 13	May 4	May 12	...	May 12
Canadian warbler	...	...	...	...	...	May 12	May 12	...	...
American redstart	May 4	May 3	May 10	May 9	May 17	May 6	May 2	...	May 2
American pipit	...	...	...	...	...	May 6	May 6	...	...
Catbird	...	May 4	May 11	May 10	May 6	May 6	May 5	May 27	May 16
Brown thrasher	...	May 1	...	May 6	May 1	...	Apr. 20	...	...
House wren	...	May 2	...	...	...	...	May 3	...	May 12
Winter wren	...	Apr. 13	...	Apr. 18	...	Apr. 25	Apr. 13	...	...
Ruby-crowned kinglet	Apr. 24	Apr. 13	Apr. 17	Apr. 12	Apr. 18	Apr. 22	Apr. 14	...	May 6
Wood thrush	...	May 3	May 11	May 5	May 13	May 3	May 4	...	...
Wilson thrush	...	May 4	May 3	...	May 4	May 3	May 7	May 17	...
Olive-backed thrush	...	...	...	May 6	May 12	May 7	May 12	...	...
Hermit thrush	Apr. 15	Apr. 10	...	May 2	Apr. 23	Apr. 10	Apr. 12	...	...
American robin	Mar. 15	Mar. 18	Mar. 6	Mar. 3	Mar. 1	Mar. 8	Feb. 24	Mar. 25	Mar 16
Bluebird	Mar. 28	Mar. 28	Mar. 11	Mar. 7	Mar. 6	Mar. 17	Feb. 24	Mar. 26	Mar. 24

a A few wintered.

90 TRANSIENTS COMMONLY REPORTED	GENEVA						PENN YAN				AUBURN						
	1898	1899	1900	1905	1906	1907	1897	1898	1899	1900	1897	1898	1899	1900	1905	1883	18
Horned grebe				Mar. 20							Apr. 15		Apr. 22	Apr. 29	aApr. 6		
Pied-billed grebe				Mar. 15						Apr. 19			Apr. 22				
Canada goose				Mar. 18		Mar. 11							Apr. 30	May 5	Mar. 29		Mar
American bittern				May 11		May 17				May 3							May
Great blue heron	Apr. 1			Apr. 21				Apr. 10		Apr. 6					Apr. 5		
Green heron				May 11		Apr. 30	May 2			May 3			May 6	Apr. 22	May 5		
Sora										May 25							
American woodcock				Apr. 30													
Wilson snipe				May 11													
Greater yellow-legs				May 4													Apr.
Solitary sandpiper												Apr. 30		Apr. 28	May 9	May 12	
Spotted sandpiper	May 10	May 14	May 7	Apr. 29	May 6	Apr. 30			Apr. 30	May 11	Apr. 19		Apr. 30	Apr. 22	Apr. 29	May 2	May
Killdeer	Mar. 25	Mar. 31	Apr. 1	Mar. 17	Apr. 4	Apr. 5		Mar. 13		Apr. 8	May 15			May 6	Mar. 19		Apr.
Mourning dove	Mar. 25	Apr. 6	Apr. 30	Apr. 9	Apr. 10	Apr. 5		Mar. 11	Apr. 5	Apr. 8	May 1	Apr. 18	May 6	Apr. 22	Mar. 30		
Marsh hawk				Apr. 24	Apr. 27	Apr. 20					May 11		Apr. 11	Apr. 8	Apr. 12		
Sparrow hawk								Mar. 20	Apr. 16		aMar. 1	Feb. 27	Apr. 30	Apr. 8	Res.	Apr. 20	Apr.
Osprey				Apr. 23						Apr. 21		Apr. 17		Apr. 28	Apr. 21		Apr.
Black-billed cuckoo	June 3	May 29	May 16	May 11						May 20	June 12		May 14	May 19			May
Belted kingfisher	Apr. 1	Apr. 14	May 9	Apr. 22	Apr. 14	Apr. 17			Apr. 12	Apr. 16	May 1	May 14	Apr. 22	Apr. 21	Apr. 18	Apr. 12	Mar.
Yellow-bellied sapsucker	Apr. 24	Apr. 17	Apr. 23	Apr. 10	Apr. 26	Apr. 17				Apr. 18	Apr. 8	May 14	Apr. 15		aApr. 6		Apr.
Red-headed woodpecker		May 14	May 17	Apr. 7		May 15		Apr. 3	Apr. 16	Apr. 15	May 11		May 21	May 16	May 1	May 12	Apr.
Northern flicker	Apr. 16	Apr. 14	Apr. 18	Mar. 30	Apr. 14	Apr. 5	Mar. 21	Apr. 10	Apr. 15	Apr. 19	Apr. 7	Apr. 17	Apr. 15	Apr. 22	Apr. 2	Apr. 10	Apr.
Whip-poor-will			May 8														
Nighthawk	May 27									May 24	June 3						
Chimney swift	May 1	Apr. 23	Apr. 22	Apr. 24	Apr. 27	Apr. 28	Apr. 24	May 1	Apr. 29	Apr. 28	Apr. 27	May 8	May 6	Apr. 26	Apr. 22	May 10	May
Ruby-throat, hummingbird	May 22	May 24	May 21	May 20		May 19				May 16	June 12		May 14	May 13	May 11	May 17	May
Kingbird	May 22	May 7	May 8	May 4		May 13	May 2	May 8	May 9	May 6	May 3	May 22	Apr. 30	May 15	May 5	May 10	May
Crested flycatcher		May 21	May 13	May 7		May 16	May 2	May 15	Apr. 30	May 9			May 6		May 10	May 12	May
Phoebe	Apr. 1	Apr. 14	Apr. 15	Mar. 23	Apr. 4	Apr. 17	Mar. 21	Mar. 20	Apr. 9	Apr. 15	Mar. 23	Apr. 10	Apr. 22	Apr. 21	Mar. 27	Apr. 7	Apr.
Wood pewee	May 30	May 22	May 16	May 13		May 14				May 13	May 30		May 14	May 19	May 18		
Least flycatcher	May 11		May 13	May 4		May 14		May 8	May 3	May 13	May 9	May 22	May 7	May 13	May 7		
Bobolink	Apr. 28	May 7	May 2	May 4	May 6	May 10		May 8	Apr. 30	May 6	May 9	May 14	May 20	May 12	May 9	May 12	May
Cowbird	Apr. 9	Apr. 19	Apr. 7	Mar. 25	Apr. 13	Apr. 5	Mar. 25	Mar. 20	Apr. 1	Mar. 24	Apr. 6	Apr. 10	Apr. 22	Apr. 22	Apr. 2	Apr. 11	Mar
Red-winged blackbird	Mar. 19	Mar. 12	Mar. 25	Mar. 25	Apr. 4	Apr. 7	Mar. 18	Mar. 9	Mar. 7	Mar. 25	Mar. 22	Mar. 16	Apr. 15	Mar. 25	Mar. 25	Apr. 2	Mar
Meadowlark	Mar. 11	Apr. 4	Apr. 10	Mar. 22	Mar. 21	Apr. 5	Mar. 28	Mar. 20	Apr. 9	Apr. 6	Mar. 21	Mar. 13	Apr. 11	Apr. 8	Mar. 12	Apr. 11	Mar
Baltimore oriole	May 11	Apr. 30	May 8	May 4	May 2	May 10	May 3	May 3	Apr. 30	May 3	May 2	May 11	May 3	May 5	May 6	May 10	May
Rusty blackbird						Apr. 7											Apr.
Crow blackbird	Mar. 10	Mar. 12	Mar. 27	Mar. 18	Apr. 4	Mar. 11	Mar. 18	Mar. 15	Mar. 25	Mar. 28	Mar. 20	Mar. 16	Apr. 11	Apr. 8	Mar. 19	Apr. 5	Mar
Purple finch	Apr. 27	May 20	May 2	Mar. 29	Apr. 10	Apr. 30	Apr. 4	Mar. 20	Apr. 1	Feb. 20				May 3	Apr. 10	Apr. 20	Mar
Vesper sparrow	Apr. 10	Apr. 12	Apr. 15	Apr. 4	Apr. 24	May 4	Mar. 28	Mar. 27	Apr. 16	Apr. 8	Apr. 5	Apr. 10	Apr. 11	Apr. 29	Mar. 22	Apr. 12	Apr.
Savannah sparrow				May 11		May 21					Apr. 15		Apr. 22		Apr. 11	May 5	
White-crowned sparrow		May 18	May 3	May 4	May 17	May 13	Apr. 21	Apr. 24		May 22	May 12		May 12		May 8	May 12	
White-throated sparrow	May 3	May 7	May 1	Apr. 20	Apr. 28	Apr. 17	Apr.	Apr. 17		Apr. 18	Apr. 23		May 12	May 20	Apr. 21		Apr
Chipping sparrow	Apr. 17	Apr. 18	Apr. 19	Apr. 5	Apr. 16	Apr. 17	Apr. 6		Apr. 15	Apr. 19	Apr. 15	Apr. 18	Apr. 22	Apr. 28	Apr. 14	Apr. 17	Mar
Field sparrow		Apr. 23		Apr. 4	Apr. 27	Apr. 23				Apr. 22	Apr. 30	May 14	Apr. 30		Apr. 12		
Song sparrow	Mar. 4	Mar. 9	Mar. 23	Mar. 4	Mar. 19	Apr. 7	Res.	Res.	Res.	Res.	Feb. 28	Mar. 16	Mar. 19	Mar. 25	Mar. 19	Apr. 5	Mar
Fox sparrow				Apr. 4			Mar. 30	Apr. 24		Apr. 18					Mar. 29		
Towhee							Apr. 21										
Rose-breasted grosbeak			May 8	May 6		May 16				May 8				May 19	May 6		
Indigo bird	May 20					May 15				May 10	June 5				May 18		May
Scarlet tanager	May 12					May 15			May 7	May 6					May 8	May 12	May
Purple martin			May 19	Apr. 30		Apr. 27				June 10	Apr. 27	Apr. 21		Apr. 27	Apr. 10		
Cliff swallow						May 19							May 21		Apr. 15		May
Barn swallow	May 3	Apr. 26	May 4	Apr. 23	May 1	May 12	Apr. 18	Apr. 24	Apr. 23	Apr. 21	Apr. 15	Apr. 18	Apr. 23	Apr. 22	Apr. 6		May
Tree swallow				Apr. 15						Apr. 4		Apr. 17	May 26		Apr. 21	Apr. 9	Apr
Bank swallow		May 7	May 13	May 2	May 1					Apr. 26	Apr. 30		May 6	May 5	Apr. 25		
Red-eyed vireo		May 23	May 13	May 1	May 6	May 13			Apr. 30	May 6	May 23		May 6		May 13		May
Warbling vireo	May 2	May 1	Apr. 30	May 3		May 9	Apr. 29	May 4	May 2	Apr. 25	Apr. 25		Apr. 30	May 5	May 6	May 5	May
Yellow-throated vireo		May 18	May 8	May 5		May 14		May 11		May 16			May 14	May 12	May 6	May 12	
Black and white warbler	May 11	May 12	May 1	Apr. 20		May 11		May 8		May 13	Apr. 27			May 5	Apr. 29	May 16	May
Nashville warbler				May 3												May 12	
Parula warbler				May 3		May 14								May 6	May 6	May 13	May
Yellow warbler	May 3	Apr. 30	May 2	May 3	May 2	May 6	Apr. 29	May 4	May 2	Apr. 29	Apr. 30	May 6	Apr. 30	May 5	May 6	May 10	May
Black-throat. blue warbler		May 17	May 2	May 3		May 14				May 6				May 5	May 5		
Myrtle warbler	May 4	Apr. 29	May 2	Apr. 26	May 9	Apr. 27		May 8	May 3	May 6	Apr. 24	May 15	Apr. 30	Apr. 28	Apr. 24	May 2	May
Magnolia warbler	May 11		May 13	May 3	May 9	May 14				May 6				May 13	May 8		
Chestnut-sided warbler			May 6	May 6	May 9	May 14	May 2	May 8		May 9	May 16			May 10	May 7	May 13	May
Bay-breasted warbler			May 16			May 20				May 16				May 18	May 13	May 16	
Black-poll warbler			May 18	May 20	May 21	June 4				May 6				May 19	May 9		
Blackburnian warbler			May 3	May 8	May 9	May 14				May 13				May 5	May 7	May 2	May
Black-throat. green warbler	May 10		May 7	May 5	May 11	May 14				May 6					May 5	May 12	May
Palm warbler						May 8					Apr. 27						
Ovenbird	May 4	May 7	May 3	May 4	May 9	May 2			Apr. 30	May 6	May 15		May 6	May 10	May 6	May 16	May
Water-thrush			May 6	Apr. 30	May 9	May 6				May 13				May 5	May 8		May
Mourning warbler				May 8	May 16	June 4											
Northern yellow-throat	May 3	May 14	May 3	May 3	May 9	May 13	May 2			May 4	May 22		May 14	May 5	May 6	May 18	May
Canadian warbler			May 13	May 9	May 17	May 14				May 20		May 15	May 14	May 19	May 9		
American redstart	May 11	May 21	May 8	May 4	May 9	May 6			May 6	May 6	May 22	May 15	May 14	May 19	May 5	May 18	
American pipit				Apr. 23													
Catbird	May 11	May 15	May 8	May 3	May 8	May 14				May 8	May 9		May 6	May 13	May 8	May 23	
Brown thrasher	May 3		May 8	Apr. 28	May 1	May 17				May 8							
House wren	May 3		May 8	May 8	Apr. 27								May 12			May 10	May
Winter wren					Apr. 13	Apr. 24								Apr. 10	Mar. 22	May 2	May
Ruby-crowned kinglet	May 1	Apr. 15	Apr. 23	Apr. 15	Apr. 22	Apr. 28			Apr. 15	Apr. 22					Apr. 20		
Wood thrush				May 1	May 9	May 14				May 6			May 6		May 8		
Wilson thrush			May 8	May 3	May 6	May 12	May 2	May 8	Apr. 23	May 4	May 9		May 9	May 10	May 6		May
Olive-backed thrush			May 19	May 3		May 14											
Hermit thrush			May 8	Apr. 22		Apr. 27			Apr. 16	Apr. 22					Apr. 10	Apr. 21	
American robin	Mar. 11	Mar. 17	Mar. 22	Mar. 4	Apr. 22	Mar. 15	Mar. 10	Mar. 10	Mar. 5	Mar. 10	Feb. 12	Mar. 9	Mar. 18	Mar. 25	Feb. 22	Mar. 11	Mar
Bluebird	Mar. 13	Mar. 12	Apr. 1	Mar. 14	Mar. 10	Mar. 17	Mar. 18	Mar. 12	Mar. 7	Mar. 25	Mar. 22	Mar. 16	Apr. 23	Mar. 25	Mar. 19	Mar. 26	Mar

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VILLE		SING SING (Ossining)					SPRINGVILLE				LOCUST GROVE						
1886	1905	1880	1881	1882	1883	1884	1880	1881	1882	1883	1873	1878	1879	1880	1881	1882	1883
.....	.....	.....	.....	.....	.....	.....	.....	Apr. 29	Apr. 8	Apr. 8	.....	.....	Apr. 26	.....	.....	.....	Apr. 27
.....	.....	.....	.....	.....	Apr. 6	Apr. 20	.....	Apr. 14	Apr. 12	.....	.....	.....	.....	Mar....	.....	Apr. 2	.....
.....	.....	Apr. 3	Apr. 1	Mar. 12	.....	Mar. 11	.....	.....	Mar. 15	.....	.....	.....	Apr. 18	.....	.....	.....	.....
Apr. 28	.....	Apr. 11	.....	.....	.....	.....	Apr. 24	Apr. 24	Apr. 28	Apr. 8	May 15	Apr. 1	.....	.....	.....	May 1	May 11
.....	.....	Apr. 3	.....	Apr. 12	.....	.....	Mar. 30	Apr. 1	Mar. 25	Apr. 5	.....	Apr. 1	Mar. 16	Apr. 17	Apr. 15	Apr. 12	Apr....
.....	.....	May 9	.....	Apr. 30	Apr. 6	May 1	May 3	May 8	May 8	May 12	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	May 8	May 2	May 4	May 6	.....	.....	.....	.....	.....	.....	.....
.....	.....	Feb. 25	.....	Feb. 19	.....	.....	.....	.....	Mar. 17	Mar. 25	.....	.....	May 3	Apr. 24	.....	Apr. 5	Apr. 28
Apr. 15	.....	.....	.....	Apr. 9	Mar. 20	.....	Mar. 30	Apr. 14	Apr. 1	Apr. 9	.....	.....	.....	.....	.....	.....	.....
Mar. 22	.....	.....	.....	.....	.....	.....	Apr. 24	Apr. 29	Apr. 21	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	May 9	May 22	May 13	.....	.....	May 8	May 2	May 5	May 12	.....	May 13	.....	.....	.....	May...	May 14
.....	Apr. 28	May 2	Apr. 29	May 3	.....	May 3	May 1	Apr. 25	Apr. 15	Apr 25	.....	Apr. 26	.....	Apr. 25	.....	Apr. 26	.....
Apr. 10	Mar. 26	.....	.....	.....	.....	.....	Mar. 4	Mar. 16	Mar. 2	Mar. 20	.....	.....	Apr. 23	Apr. 20	.....	.....	.....
.....	.....	Apr. 4	Apr. 10	aApr. 2	Mar. 18	Apr. 12	.....	Apr. 22	May 1	Apr. 3	.....	.....	.....	.....	.....	.....	.....
.....	.....	Mar. 28	Apr. 3	Apr. 2	Mar. 18	Mar. 20	.....	.....	.....	.....	.....	Apr. 1	.....	Apr....	.....	Apr....	.....
Apr. 8	.....	.....	.....	Apr. 2	Apr. 13	Apr. 16	.....	Mar. 18	Mar. 17	Mar. 28	.....	Apr. 2	Apr. 28	Mar. 3	Apr. 24	Mar. 29	.....
Apr. 10	.....	Apr. 15	Apr. 10	Apr. 9	Apr. 6	Apr. 11	.....	.....	.....	Apr. 17	.....	.....	Apr. 12	May 1	.....	.....	.....
May 12	.....	May 4	May 9	.....	May 18	May 3	.....	.....	May 15	May 11	June 5	May 9	.....	May 23	.....	.....	.....
Apr. 12	.....	Apr. 4	Apr. 10	Apr. 5	Apr. 14	Apr.. 1	Mar. 31	Apr. 9	Apr. 2	Apr. 6	Apr....	Apr....	Apr. 20	Apr. 13	.....	Apr. 2	Apr. 16
Apr. 15	Apr. 2	Apr. 5	Apr. 20	Apr. 16	w.....	w.....	Apr. 13	Apr. 12	Apr. 14	Apr. 15	Apr. 18	Apr. 13	Apr. 17	Apr. 8	.....	Apr. 7	Apr. 26
Apr. 9	May 11	.....	.....	aApr. 5	May 13	.....	May 4	May 6	May 10	May 5	May 26	Res....	May 11	Res....	.....	Res....	May 7
Apr. 13	Apr. 2	Mar. 23	.....	Apr. 2	Apr. 14	Mar. 25	Feb. 27	Apr. 20	Apr. 2	Apr. 9	.....	Apr. 8	Apr. 25	Apr. 15	.....	Apr. 2	Apr. 18
.....	.....	May 9	.....	Apr. 18	.....	May 5	.....	.....	.....	.....	May 10	May 17	May 17	May 10	.....	May 3	.....
.....	.....	May 9	May 11	.....	May 9	May 20	.....	May 11	May 13	.....	May 22	Apr. 18	May 12	Apr. 13	.....	Apr. 22	May 6
May 17	Apr. 28	Apr. 19	Apr. 22	Apr. 29	Apr. 25	Apr. 27	May 6	May 1	Apr. 29	May 3	May 30	May 10	May...	May 7	.....	Apr. 29	May 10
May 17	May 16	Apr. 30	May 10	May 3	May 9	May 9	May 15	May 15	May 10	May 15	May 23	May 7	May 19	May 18	.....	.....	May 15
.....	May 4	May 2	May 2	May 3	May 9	May 3	Apr. 26	May 2	May 6	May 3	May 14	May 3	May 9	May 3	.....	May 16	May 9
May 9	May 6	May 9	May 15	May 10	May 9	.....	May 4	May 9	May 9	May 5	May 10	May 4	May 11	May 3	.....	May 10	May 8
Apr. 12	Apr. 2	Mar. 17	Mar. 23	Mar. 19	Mar. 25	Mar. 16	Mar. 30	Apr. 18	Apr. 1	Apr. 9	Apr....	Mar. 31	Apr. 7	Apr. 4	Apr....	Apr. 2	Apr. 9
.....	May 11	May 10	May 10	May 21	May 19	May 16	May 15	May 6	May 20	May 26	.....	May 13	May 13	May 18	.....	May 21	May 18
May 9	May 6	Apr. 30	Apr. 26	May 1	May 6	May 3	May 5	May 6	May 7	May 11	May 8	Apr. 25	May 8	May 3	.....	May 7	May 10
May 9	May 10	May 2	May 1	May 2	May 8	May 2	May 4	May 5	May 3	May 9	May 12	May 8	May 11	May 8	May 8	May 7	May 11
Apr. 5	.....	.....	Apr. 1	Apr. 2	Mar. 25	.....	Mar. 25	Mar. 24	Mar. 6	Mar. 15	.....	Apr. 2	Apr. 21	Apr. 3	.....	Mar. 18	May 2
Apr. 5	Apr. 2	Mar. 4	Feb. 20	Mar. 4	Mar. 2	Feb. 25	Feb. 28	Mar. 10	Mar. 2	Mar. 10	Apr. 22	Apr. 1	Apr. 20	Apr. 9	Apr. 1	Mar. 5	Mar. 29
Apr. 1	Mar. 26	.....	.....	Apr. 2	.....	Feb. 25	Mar. 3	Mar. 16	Mar. 3	Mar. 15	Apr. 17	Apr. 2	Apr. 14	Apr. 3	.....	Mar. 27	Apr. 20
May 8	May 6	May 2	May 7	May 2	May 5	May 2	May 3	May 5	May 4	May 5	May 10	May 2	May 8	May 4	May 9	May 10	May 10
Mar. 26	.....	.....	.....	Mar. 26	.....	.....	.....	Apr. 28	Apr. 5	.....	Apr....	Apr. 1	.....	Apr. 2	.....	.....	Apr. .
Mar. 21	Mar. 26	.....	.....	.....	.....	Mar. 13	Mar. 22	Mar. 20	Mar. 3	Mar. 25	.....	Mar. 28	Apr. 6	Mar. 5	Mar. 29	Mar. 28	Mar. 31
Mar. 26	Apr. 2	Apr. 4	Apr. 25	Apr. 2	.....	w.....	Mar. 30	Apr. 18	Mar. 17	Mar. 31	.....	Res....	Apr. 18	Apr. 18	.....	Apr. 5	Apr. 22
Apr. 13	Apr. 2	Apr. 2	Apr. 8	Apr. 7	.....	Apr. 2	Apr. 7	Apr. 10	Apr. 2	Apr. 4	Apr....	Apr. 13	Apr. 20	Apr. 7	.....	Apr. 5	Apr. 26
.....	.....	.....	.....	Apr. 9	.....	Apr. 6	Apr. 3	Apr. 11	Apr. 5	Apr. 11	Apr....	Apr. 27	Apr. 27	Apr. 13	.....	Apr. 14	Apr. 26
.....	May 9	.....	.....	May 9	.....	.....	.....	May 5	May 9	May 9	May 5	May 10	May 12	May 8	.....	.....	May 10
.....	Apr. 28	.....	.....	Apr. 9	Apr. 14	Apr. 17	Apr. 28	Apr. 26	May 8	May 5	Apr....	Apr. 17	Apr. 26	May 2	.....	Mar. 29	Apr. 6
Apr. 15	Apr. 26	Apr. 9	Apr. 19	Apr. 12	Apr. 14	Apr. 14	Apr. 13	Apr. 22	Apr. 7	Apr. 11	.....	Apr. 12	Apr. 24	Apr. 21	.....	Apr. 19	Apr. 26
.....	.....	Mar. 23	Apr. 10	Apr. 2	Apr. 13	Apr. 13	.....	Apr. 14	Apr. 8	Apr. 10	.....	.....	.....	.....	.....	.....	.....
Feb. 19	Mar. 20	aMar. 4	aFeb. 20	aFeb. 26	aFeb. 23	aFeb. 14	Mar. 15	Mar. 16	Mar. 8	Mar. 15	Apr....	Mar. 28	Apr. 10	Apr. 2	Mar. 8	Mar. 29	Apr....
.....	.....	Mar. 4	Apr. 3	Mar. 19	Mar. 4	Feb. 15	Apr. 8	.....	.....	.....	May 5	.....	.....	Apr. 14	.....	Mar. 31	.....
.....	.....	Apr. 21	Apr. 26	Apr. 23	Apr. 22	May 3	.....	Apr. 29	.....	.....	.....	May 9	.....	.....	.....	.....	.....
May 15	May 7	May 3	May 14	May 3	.....	May 13	May 5	May 10	May 11	May 11	May 3	May 24	May 19	May 6	.....	May 17	May 13
May 23	May 16	May 9	May 9	May 18	May 13	May 14	May 12	May 12	May 11	May 13	May 2	May 19	May 24	May 24	.....	.....	May 22
May 11	May 14	May 6	May 10	May 4	May 9	May 13	May 10	May 9	May 8	May 11	May 13	May 8	May 14	May 10	.....	.....	May 10
.....	.....	.....	Apr. 26	Apr. 29	May 6	.....	.....	.....	.....	Apr. 23	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	Apr. 22	Apr. 24	Apr. 30	Apr. 20	Apr....	Apr. 14	May 3	Apr. 20	.....	May 3	Apr. 20
Apr. 29	Apr. 22	Apr. 22	Apr. 22	Apr. 20	Apr. 28	Apr. 19	Apr. 14	Apr. 16	Apr. 18	Apr. 15	Apr....	Apr. 14	Apr. 20	Apr. 21	.....	Apr. 19	Apr. 20
Apr. 17	Apr. 14	Apr. 4	.....	Apr. 20	Apr. 6	Apr. 6	.....	.....	.....	Apr. 12	May 10	Apr. 18	May 2	May 28	.....	Apr. 14	Apr. 8
.....	.....	Apr. 22	.....	Apr. 29	.....	.....	Apr. 21	Apr. 22	Apr. 27	Apr. 16	.....	Apr....	.....	May 5	.....	May 22	May 10
May 9	May 9	May 5	Apr. 22	Apr. 29	May 9	May 14	May 12	May 11	.....	May 11	May 23	May 14	May 20	May 4	.....	May 10	May 14
.....	.....	May 8	May 3	.....	May 12	May 8	May 6	May 8	May 10	May 3	.....	May 10	.....	May 14	.....	.....	May 10
.....	May 9	May 2	May 1	Apr. 30	May 5	May 2	.....	May 9	May 13	May 5	May 12	May 9	May 14	May 7	.....	May 12	May 14
May 4	Apr. 30	Apr. 22	May 1	Apr. 23	May 5	May 1	Apr. 21	May 6	May 11	May 5	.....	Apr. 24	May 7	May 12	.....	May 23	.....
.....	May 4	.....	May 15	May 10	.....	May 8	.....	Apr. 26	May 8	May 5	May 10	Apr. 24	.....	.....	.....	.....	.....
.....	May 6	May 3	May 11	May 2	May 5	May 8	.....	.....	May 12	.....	May 8	May 3	May 4	.....	.....	May 10	May 8
May 6	May 9	May 2	May 8	Apr. 30	May 13	May 7	May 2	May 3	Apr. 29	May 3	May 12	May 7	May 12	May 5	.....	May 9	May 7
.....	May 4	May 2	Apr. 26	May 5	May 8	May 10	.....	.....	.....	May 12	May 10	May 7	.....	May 7	.....	May 22	May 11
May 4	Apr. 26	Apr...15	.....	Apr. 29	Apr. 13	May 1	Apr. 21	Apr. 27	Apr. 25	Apr. 28	May 2	Apr. 28	May 2	Apr. 21	.....	Apr. 20	May 1
.....	May 9	May 9	May 12	May 20	May 8	May 13	May 14	May 19	.....	.....	May 21	May 21	.....	May 13	.....	May 21	May 23
.....	May 7	May 2	May 12	May 13	May 8	May 13	May 5	May 9	May 11	May 12	May 13	.....	.....	May 4	.....	May 23	May 11
.....	May 19	.....	May 18	.....	.....	May 14	.....	May 9	.....	.....	May 26	.....	.....	May 13	.....	.....	.....
.....	.....	May 12	May 13	May 21	.....	May 20	.....	May 23	May 21	.....	.....	.....	.....	.....	.....	June 1	.....
.....	May 4	May 16	May 19	May 10	May 13	May 14	.....	.....	May 8	May 12	May 14	May 9	Apr. 29	.....	.....	May 21	May 11
May 6	May 9	May 2	Apr. 30	May 2	May 5	Apr. 28	May 8	May 4	.....	May 5	May 13	Apr. 27	.....	.....	.....	May 10	May 11
.....	.....	Apr. 4	Apr. 23	Apr. 23	Apr. 14	Apr. 27	.....	.....	.....	Apr. 21	.....	.....	.....	May 1	.....	.....	.....
.....	May 4	May 2	May 1	Apr. 29	May 4	Apr. 27	May 10	May 9	May 2	May 5	May 8	May 3	May 8	May 4	.....	May 10	May 8
.....	Apr. 30	May 17	May 22	May 21	May 17	.....	.....	.....	May 1	.....	May 17	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	May 29	.....	.....	.....	.....	.....	May 12	May 28	May 24	May 22	May 24	.....	.....	May 31
.....	May 11	May 5	May 10	May 2	May 14	May 5	May 12	.....	.....	May 11	May 13	.....	May 24	.....	.....	May 22	May 16
.....	May 14	.....	May 13	May 21	May 18	May 6	May 12	May 10	May 8	.....	May 14	.....	May 15	.....	.....	May 22	May 23
May 6	May 9	May 3	May 7	May 1	May 8	May 6	May 10	May 11	May 11	May 12	May 8	May 9	May 15	May 4	.....	May 10	May 14
.....	.....	Mar. 31	.....	.....	.....	.....	.....	.....	.....	May 12	May 6	May 15	May 8	May 11	.....	.....	.....
4 May 22	May 11	Apr. 29	Apr. 30	Apr. 29	May 4	May 2	May 5	May 8	May 3	May 10	.....	May 23	Apr. 21	May 9	.....	May 17	May 15
.....	.....	Apr. 22	Apr. 28	Apr. 23	Apr. 22	Apr. 27	.....	May 3	Apr. 30	.....	May 13	May 13	.....	May 8	.....	May 8	May 7
0 May 6	May 4	Apr. 24	Apr. 26	Apr. 25	Apr. 24	Apr. 30	May 3	May 10	May 6	May 4	May 5	.....	Apr. 30	.....	.....	.....	May 22
.....	Apr. 2	.....	Feb. 27	.....	.....	Mar. 20	.....	.....	.....	.....	Apr. 13	Apr. 8	Apr. 16	Apr. 5	.....	Apr. 12	Apr....
.....	.....	Apr. 19	Apr. 23	Apr. 16	Apr. 18	Apr. 20	Apr. 24	Apr. 27	Apr. 24	Apr. 20	.....	Apr. 17	Apr. 28	Apr. 15	.....	May 5	Apr. 30
.....	.....	Apr. 30	Apr. 30	Apr. 30	May 3	May 3	May 8	May 4	May 15	May 11	.....	.....	.....	.....	.....	.....	.....
7	May 6	Apr. 29	May 1	May 3	May 12	May 6	May 4	Apr. 28	May 8	May 7	May 6	May 10	.....	May 6	.....	May 10	May 14
0 May 6	May 21	May 2	May 3	May 11	May 14	May 17	.....	.....	.....	.....	May 23	.....	May 15	.....	.....	.....	May 23
Apr. 20	.....	Apr. 8	Apr. 22	Apr. 13	Apr. 8	Apr. 5	Apr. 17	Apr. 27	Apr. 24	Apr. 21	.....	Apr. 9	Apr. 21	Apr. 9	.....	Apr. 3	Apr. 13
1 Mar. 20	Mar. 18	.....	Jan. 30	Feb. 12	Feb. 25	Jan. 23	Feb. 20	Mar. 7	Feb.. 16	Mar. 2	.....	Mar. 26	Mar....	Feb. 28	Mar. 18	Feb. 15	Mar. 15
1 Mar. 22	Mar. 18	a.....	a.....	Feb. 15	Feb. 25	Feb. 10	Feb. 26	Mar. 10	Feb. 20	Mar. 2	Apr. 17	Mar....	Mar. 12	Feb. 28	Mar. 20	Feb. 28	Mar. 21

90 TRANSIENTS COMMONLY REPORTED	Geneva 1898	Geneva 1899	Geneva 1900	Geneva 1905	Geneva 1906	Geneva 1907	Penn Yan 1897	Penn Yan 1898	Penn Yan 1899	Penn Yan 1900
Horned grebe				Mar. 20						
Pied-billed grebe				Mar. 15						Apr. 19
Canada goose				Mar. 18		Mar. 11				
American bittern				May 11		May 17				May 3
Great blue heron	Apr. 1			Apr. 21				Apr. 10		Apr. 6
Green heron				May 11		Apr. 30	May 2			May 3
Sora										May 25
American woodcock				Apr. 30						
Wilson snipe				May 11						
Greater yellow-legs				May 4						
Solitary sandpiper										
Spotted sandpiper	May 10	May 14	May 7	Apr. 29	May 6	Apr. 30			Apr. 30	May 11
Killdeer	Mar. 25	Mar. 31	Apr. 1	Mar. 17	Apr. 4	Apr. 5		Mar. 13		Apr. 8
Mourning dove	Mar. 25	Apr. 6	Apr. 30	Apr. 9	Apr. 10	Apr. 5		Mar. 11	Apr. 5	Apr. 8
Marsh hawk				Apr. 24	Apr. 27	Apr. 20				
Sparrow hawk								Mar. 20	Apr. 16	
Osprey				Apr. 23						Apr. 21
Black-billed cuckoo	June 3	May 29	May 16	May 11						May 20
Belted kingfisher	Apr. 1	Apr. 14	May 9	Apr. 22	Apr. 14	Apr. 17			Apr. 12	Apr. 16
Yellow-bellied sapsucker	Apr. 24	Apr. 17	Apr. 23	Apr. 10	Apr. 26	Apr. 17				Apr. 18
Red-headed woodpecker		May 14	May 17	Apr. 7		May 15		Apr. 3	Apr. 16	Apr. 15
Northern flicker	Apr. 16	Apr. 14	Apr. 18	Mar. 30	Apr. 14	Apr. 5	Mar. 21	Apr. 10	Apr. 15	Apr. 19
Whip-poor-will			May 8							
Nighthawk	May 27									May 24
Chimney swift	May 1	Apr. 23	Apr. 22	Apr. 24	Apr. 27	Apr. 28	Apr. 24	May 1	Apr. 20	Apr. 28
Ruby-throat, hummingbird	May 22	May 24	May 21	May 20		May 19				May 16
Kingbird	May 22	May 7	May 8	May 4		May 13	May 2	May 8	May 9	May 6
Crested flycatcher		May 21	May 13	May 7		May 16	May 2	May 15	Apr. 30	May 9
Phœbe	Apr. 1	Apr. 14	Apr. 15	Mar. 23	Apr. 4	Apr. 17	Mar. 21	Mar. 20	Apr. 9	Apr. 15
Wood pewee	May 30	May 22	May 16	May 13		May 14				May 13
Least flycatcher	May 11		May 13	May 4		May 14		May 8	May 3	May 13
Bobolink	Apr. 28	May 7	May 2	May 4	May 6	May 10		May 8	Apr. 30	May 6
Cowbird	Apr. 9	Apr. 19	Apr. 7	Mar. 25	Apr. 13	Apr. 5	Mar. 25	Mar. 20	Apr. 1	Mar. 24
Red-winged blackbird	Mar. 19	Mar. 12	Mar. 25	Mar. 25	Apr. 4	Apr. 7	Mar. 18	Mar. 9	Mar. 7	Mar. 25
Meadowlark	Mar. 11	Apr. 4	Apr. 10	Mar. 22	Mar. 21	Apr. 5	Mar. 28	Mar. 20	Apr. 9	Apr. 6
Baltimore oriole	May 11	Apr. 30	May 8	May 4	May 2	May 10	May 3	May 3	Apr. 30	May 3
Rusty blackbird						Apr. 7				
Crow blackbird	Mar. 10	Mar. 12	Mar. 27	Mar. 18	Apr. 4	Mar. 11	Mar. 18	Mar. 15	Mar. 25	Mar. 28
Purple finch	Apr. 27	May 20	May 2	Mar. 29	Apr. 10	Apr. 30	Apr. 4	Mar. 20	Apr. 1	Feb. 20
Vesper sparrow	Apr. 10	Apr. 12	Apr. 15	Apr. 4	Apr. 24	May 4	Mar. 28	Mar. 27	Apr. 16	Apr. 8
Savannah sparrow				May 11		May 21				
White-crowned sparrow		May 18	May 3	May 4	May 17	May 13	Apr. 21	Apr. 24		May 22
White-throated sparrow	May 3	May 7	May 1	Apr. 20	Apr. 28	Apr. 17	Apr....	Apr. 17		Apr. 18
Chipping sparrow	Apr. 17	Apr. 18	Apr. 19	Apr. 5	Apr. 16	Apr. 17	Apr. 6		Apr. 15	Apr. 19
Field sparrow		Apr. 23		Apr. 4	Apr. 27	Apr. 23				Apr. 22
Song sparrow	Mar. 4	Mar. 9	Mar. 23	Mar. 4	Mar. 19	Apr. 7	Res....	Res....	Res....	Res....
Fox sparrow				Apr. 4			Mar. 30	Apr. 24		Apr. 18
Towhee							Apr. 21			
Rose-breasted grosbeak			May 8	May 6		May 16				May 8
Indigo bird	May 20					May 15				May 10
Scarlet tanager	May 12					May 15			May 7	May 6
Purple martin			May 19	Apr. 30		Apr. 27				June 10
Cliff swallow						May 10				
Barn swallow	May 3	Apr. 26	May 4	Apr. 23	May 1	May 12	Apr. 18	Apr. 24	Apr. 23	Apr. 21
Tree swallow				Apr. 15						Apr. 4
Bank swallow		May 7	May 13	May 2	May 1					Apr. 26
Red-eyed vireo		May 23	May 13	May 1	May 6	May 13			Apr. 30	May 6
Warbling vireo	May 2	May 1	Apr. 30	May 3		May 9	Apr. 29	May 4	May 2	Apr. 25
Yellow-throated vireo		May 18	May 8	May 5		May 14		May 11		May 16
Black and white warbler	May 11	May 12	May 1	Apr. 20		May 11		May 8		May 13
Nashville warbler				May 3						
Parula warbler				May 3		May 14				
Yellow warbler	May 3	Apr. 30	May 2	May 3	May 2	May 6	Apr. 29	May 4	May 2	Apr. 29
Black-throat, blue warbler		May 17	May 2	May 3		May 14				May 6
Myrtle warbler	May 4	Apr. 29	May 2	Apr. 26	May 9	Apr. 27		May 8	May 3	May 6
Magnolia warbler	May 11		May 13	May 3	May 9	May 14				May 6
Chestnut-sided warbler			May 6	May 6	May 9	May 14	May 2	May 8		May 9
Bay-breasted warbler			May 16			May 20				May 16
Black-poll warbler			May 18	May 20	May 21	June 4				May 6
Blackburnian warbler			May 3	May 8	May 9	May 14				May 13
Black-throat, green warbler	May 10		May 7	May 5	May 11	May 14				May 6
Palm warbler						May 8				
Ovenbird	May 4	May 7	May 3	May 4	May 9	May 2			Apr. 30	May 6
Water-thrush			May 6	Apr. 30	May 9	May 6				May 13
Mourning warbler				May 8	May 16	June 4				
Northern yellow-throat	May 3	May 14	May 3	May 3	May 9	May 13	May 2			May 4
Canadian warbler			May 13	May 9	May 17	May 14				May 20
American redstart	May 11	May 21	May 8	May 4	May 9	May 6			May 6	May 6
American pipit				Apr. 23						
Catbird	May 11	May 15	May 8	May 3	May 8	May 14				May 8
Brown thrasher	May 3		May 8	Apr. 28	May 1	May 17				May 8
House wren	May 3		May 8	May 8	Apr. 27					
Winter wren					Apr. 13	Apr. 24				
Ruby-crowned kinglet	May 1	Apr. 15	Apr. 23	Apr. 15	Apr. 22	Apr. 28			Apr. 15	Apr. 22
Wood thrush				May 1	May 9	May 14				May 6
Wilson thrush			May 8	May 3	May 6	May 12			Apr. 23	May 4
Olive-backed thrush			May 19	May 3		May 14	May 2	May 8		
Hermit thrush			May 8	Apr. 22		Apr. 27			Apr. 16	Apr. 22
American robin	Mar. 11	Mar. 17	Mar. 22	Mar. 4	Apr. 22	Mar. 15	Mar. 10	Mar. 10	Mar. 5	Mar. 10
Bluebird	Mar. 13	Mar. 12	Apr. 1	Mar. 14	Mar. 10	Mar. 17	Mar. 18	Mar. 12	Mar. 7	Mar. 25

90 TRANSIENTS COMMONLY REPORTED	Auburn 1897	Auburn 1898	Auburn 1899	Auburn 1900	Auburn 1905	Lowville 1883	Lowville 1884	Lowville 1885	Lowville 1886	Lowville 1905
Horned grebe	Apr. 15		Apr. 22	Apr. 29	[a] Apr. 6					
Pied-billed grebe			Apr. 22							
Canada goose			Apr. 30	May 5	Mar. 29		Mar. 27	Mar. 31		
American bittern							May 13		Apr. 28	
Great blue heron					Apr. 5			Apr. 11		
Green heron			May 6	Apr. 22	May 5					
Sora										
American woodcock										
Wilson snipe									Apr. 15	
Greater yellow-legs							Apr. 4		Mar. 22	
Solitary sandpiper		Apr. 30		Apr. 28	May 9	May 12				
Spotted sandpiper	Apr. 19		Apr. 30	Apr. 22	Apr. 29	May 2	May 3	Apr. 23		Apr. 28
Killdeer	May 15			May 6	Mar. 19		Apr. 30		Apr. 10	Mar. 26
Mourning dove	May 1	Apr. 18	May 6	Apr. 22	Mar. 30					
Marsh hawk	May 11		Apr. 11	Apr. 8	Apr. 12					
Sparrow hawk	[a] Mar. 1	Feb. 27	Apr. 30	Apr. 8	Res....	Apr. 20	Apr. 23	May 2	Apr. 8	
Osprey		Apr. 17		Apr. 28	Apr. 21		Apr. 14		Apr. 10	
Black-billed cuckoo	June 12		May 14	May 19			May 25		May 12	
Belted kingfisher	May 1	May 14	Apr. 22	Apr. 21	Apr. 18	Apr. 12	Mar. 29	Apr. 18	Apr. 12	
Yellow-bellied sapsucker	Apr. 8	May 14	Apr. 15		[a] Apr. 6		Apr. 14	Apr. 19	Apr. 15	Apr. 2
Red-headed woodpecker	May 11		May 21	May 16	May 1	May 12	Apr. 30	May 16	Apr. 9	May 11
Northern flicker	Apr. 7	Apr. 17	Apr. 15	Apr. 22	Apr. 2	Apr. 10	Apr. 18	Apr. 19	Apr. 13	Apr. 2
Whip-poor-will										
Nighthawk	June 3									
Chimney swift	Apr. 27	May 8	May 6	Apr. 26	Apr. 22	May 10	May 7	May 9	May 17	Apr. 28
Ruby-throat, hummingbird	June 12		May 14	May 13	May 11	May 17	May 11		May 17	May 16
Kingbird	May 3	May 22	Apr. 30	May 15	May 5	May 10	May 4	May 12		May 4
Crested flycatcher			May 6		May 10	May 12	May 17	May 17	May 9	May 6
Phœbe	Mar. 23	Apr. 10	Apr. 22	Apr. 21	Mar. 27	Apr. 7	Apr. 13	Apr. 5	Apr. 12	Apr. 2
Wood pewee	May 30		May 14	May 19	May 18					May 11
Least flycatcher	May 9	May 22	May 7	May 13	May 7			May 10	May 9	May 6
Bobolink	May 9	May 14	May 20	May 12	May 9	May 12	May 11	May 13	May 9	May 10
Cowbird	Apr. 6	Apr. 10	Apr. 22	Apr. 22	Apr. 2	Apr. 11	Mar. 29	Apr. 16	Apr. 5	
Red-winged blackbird	Mar. 22	Mar. 16	Apr. 15	Mar. 25	Mar. 25	Apr. 2	Mar. 27	Apr. 11	Apr. 5	Apr. 2
Meadowlark	Mar. 21	Mar. 13	Apr. 11	Apr. 8	Mar. 12	Apr. 11	Mar. 28	Apr. 10	Apr. 1	Mar. 26
Baltimore oriole	May 2	May 11	May 3	May 5	May 6	May 10	May 13	May 13	May 8	May 6
Rusty blackbird							Apr. 7		Mar. 26	
Crow blackbird	Mar. 20	Mar. 16	Apr. 11	Apr. 8	Mar. 19	Apr. 5	Mar. 22	Mar. 31	Mar. 21	Mar. 26
Purple finch				May 3	Apr. 10	Apr. 20	Mar. 24	Apr. 22	Mar. 26	Apr. 2
Vesper sparrow	Apr. 5	Apr. 10	Apr. 11	Apr. 29	Mar. 22	Apr. 12	Apr. 19	Apr. 10	Apr. 13	Apr. 2
Savannah sparrow	Apr. 15		Apr. 22		Apr. 11	May 5				
White-crowned sparrow	May 12		May 12		May 8	May 12				May 9
White-throated sparrow	Apr. 23		May 12	May 20	Apr. 21		Apr. 30	Apr. 27		Apr. 28
Chipping sparrow	Apr. 15	Apr. 18	Apr. 22	Apr. 28	Apr. 14	Apr. 17	Mar. 31	Apr. 19	Apr. 15	Apr. 26
Field sparrow	Apr. 30	May 14	Apr. 30		Apr. 12					
Song sparrow	Feb. 28	Mar. 16	Mar. 19	Mar. 25	Mar. 19	Apr. 5	Mar. 21	Apr. 3	Feb. 19	Mar. 20
Fox sparrow					Mar. 29					
Towhee										
Rose-breasted grosbeak				May 19	May 6			May 15	May 15	May 7
Indigo bird	June 5				May 18		May 27	May 23	May 23	May 16
Scarlet tanager					May 8	May 12	May 9	May 11	May 11	May 14
Purple martin	Apr. 27	Apr. 21		Apr. 27	Apr. 10			May 12		
Cliff swallow			May 21		Apr. 15		May 10	May 9		
Barn swallow	Apr. 15	Apr. 18	Apr. 23	Apr. 22	Apr. 6		May 4	Apr. 22	Apr. 29	Apr. 22
Tree swallow		Apr. 17	May 26		Apr. 21	Apr. 9	Apr. 20	Apr. 20	Apr. 17	Apr. 14
Bank swallow	Apr. 30		May 6	May 5	Apr. 25					
Red-eyed vireo	May 23		May 6		May 13		May 18	May 18	May 9	May 9
Warbling vireo	Apr. 25		Apr. 30	May 5	May 6	May 5	May 11	May 17		
Yellow-throated vireo			May 14	May 12	May 6	May 12		May 10		May 9
Black and white warbler	Apr. 27			May 5	Apr. 29	May 16	May 4	May 5	May 4	Apr. 30
Nashville warbler						May 12				May 4
Parula warbler				May 6	May 6	May 13	May 10	May 16		May 6
Yellow warbler	Apr. 30	May 6	Apr. 30	May 5	May 6	May 10	May 11	May 12	May 6	May 9
Black-throat, blue warbler				May 5	May 5					May 4
Myrtle warbler	Apr. 24	May 15	Apr. 30	Apr. 28	Apr. 24	May 2	May 4	May 3	May 4	Apr. 26
Magnolia warbler				May 13	May 8					May 9
Chestnut-sided warbler	May 16			May 10	May 7	May 11	May 17			May 7
Bay-breasted warbler				May 18	May 13	May 16				May 19
Black-poll warbler				May 19	May 9					
Blackburnian warbler				May 5	May 7	May 2	May 17	May 16		May 4
Black-throat, green warbler					May 5	May 12	May 4	May 15	May 6	May 9
Palm warbler	Apr. 27									
Ovenbird	May 15		May 6	May 10	May 6	May 16	May 11			May 4
Water-thrush				May 5	May 8		May 12			Apr. 30
Mourning warbler										
Northern yellow-throat	May 22		May 14	May 5	May 6	May 18	May 18			May 11
Canadian warbler		May 15	May 14	May 19	May 0					May 14
American redstart	May 22	May 15	May 14	May 19	May 5	May 18			May 6	May 9
American pipit										
Catbird	May 9		May 6	May 13	May 8	May 23		May 24	May 22	May 11
Brown thrasher										
House wren			May 12			May 10	May 10	May 19	May 6	May 4
Winter wren				Apr. 10	Mar. 22	May 2	May 7			Apr. 2
Ruby-crowned kinglet					Apr. 20					
Wood thrush			May 6		May 8					
Wilson thrush	May 9		May 9	May 10	May 6		May 7	May 17		May 6
Olive-backed thrush								May 10	May 6	May 21
Hermit thrush					Apr. 10	Apr. 21			Apr. 20	
American robin	Feb. 12	Mar. 9	Mar. 18	Mar. 25	Feb. 22	Mar. 11	Mar. 21	Mar. 31	Mar. 20	Mar. 18
Bluebird	Mar. 22	Mar. 16	Apr. 23	Mar. 25	Mar. 19	Mar. 26	Mar. 23	Mar. 31	Mar. 22	Mar. 28

90 TRANSIENTS COMMONLY REPORTED	Sing Sing (Ossining) 1880	Sing Sing 1881	Sing Sing 1882	Sing Sing 1883	Sing Sing 1884	Springville 1880	Springville 1881	Springville 1882	Springville 1883	Locust Grove 1873	Locust Grove 1878	Locust Grove 1879	Locust Grove 1880	Locust Grove 1881	Locust Grove 1882	Locust Grove 1883
Horned grebe							Apr. 29	Apr. 8	Apr. 8			Apr. 26				Apr. 27
Pied-billed grebe				Apr. 6	Apr. 20		Apr. 14	Apr. 12					Mar....		Apr. 2	
Canada goose	Apr. 3	Apr. 1	Mar. 12		Mar. 11			Mar. 15				Apr. 18				
American bittern	Apr. 11					Apr. 24	Apr. 24	Apr. 28	Apr. 8	May 15	Apr. 1				May 1	May 11
Great blue heron	Apr. 3		Apr. 12			Mar. 30	Apr. 1	Mar. 25	Apr. 5		Apr. 1	Mar. 16	Apr. 17	Apr. 15	Apr. 12	Apr....
Green heron	May 9		Apr. 30	Apr. 6	May 1	May 3	May 8	May 8	May 12							
Sora						May 8	May 2	May 4	May 6							
American woodcock	Feb. 25		Feb. 19					Mar. 17	Mar. 25			May 3	Apr. 24		Apr. 5	Apr. 28
Wilson snipe			Apr. 9	Mar. 20		Mar. 30	Apr. 14	Apr. 1	Apr. 9							
Greater yellow-legs						Apr. 24	Apr. 29	Apr. 21								
Solitary sandpiper	May 9	May 22	May 13			May 8	May 2	May 5	May 12		May 13				May...	May 14
Spotted sandpiper	May 2	Apr. 29	May 3		May 3	May 1	Apr. 25	Apr. 15	Apr 25		Apr. 26		Apr. 25		Apr. 20	
Killdeer						Mar. 4	Mar. 16	Mar. 2	Mar. 20			Apr. 23	Apr. 20			
Mourning dove	Apr. 4	Apr. 10	[a] Apr. 2	Mar. 18	Apr. 12		Apr. 22	May 1	Apr. 3							
Marsh hawk	Mar. 28	Apr. 3	Apr. 2	Mar. 18	Mar. 20						Apr. 1		Apr....		Apr....	
Sparrow hawk			Apr. 2	Apr. 13	Apr. 16		Mar. 18	Mar. 17	Mar. 28		Apr. 2	Apr. 28	Mar. 3	Apr. 24	Mar. 29	
Osprey	Apr. 15	Apr. 10	Apr. 9	Apr. 6	Apr. 11				Apr. 17			Apr. 12	May 1			
Black-billed cuckoo	May 4	May 9		May 18	May 3			May 15	May 11	June 5	May 9		May 23			
Belted kingfisher	Apr. 4	Apr. 10	Apr. 5	Apr. 14	Apr. 1	Mar. 31	Apr. 9	Apr. 2	Apr. 6	Apr....	Apr....	Apr. 20	Apr. 13		Apr. 2	Apr. 16
Yellow-bellied sapsucker	Apr. 5	Apr. 20	Apr. 16	w....	w....	Apr. 13	Apr. 12	Apr. 14	Apr. 15	Apr. 18	Apr. 13	Apr. 17	Apr. 8		Apr. 7	Apr. 26
Red-headed woodpecker			[a] Apr. 5	May 13		May 4	May 6	May 10	May 5	May 26	Res....	May 11	Res....		Res....	May 7
Northern flicker	Mar. 23		Apr. 2	Apr. 14	Mar. 25	Feb. 27	Apr. 20	Apr. 2	Apr. 9		Apr. 8	Apr. 25	Apr. 15		Apr. 2	Apr. 18
Whip-poor-will	May 9		Apr. 1[illegible]		May 5					May 10	May 17	May 17	May 10		May 3	
Nighthawk	May 9	May 11		May 9	May 20		May 11	May 13		May 22	Apr. 18	May 12	Apr. 13		Apr. 22	May 6
Chimney swift	Apr. 19	Apr. 22	Apr. 29	Apr. 25	Apr. 27	May 6	May 1	Apr. 29	May 3	May 30	May 10	May...	May 7		Apr. 29	May 10
Ruby-throat, hummingbird	Apr. 30	May 10	May 3	May 9	May 9	May 15	May 15	May 10	May 15	May 23	May 7	May 19	May 18			May 15
Kingbird	May 2	May 2	May 3	May 9	May 3	Apr. 26	May 2	May 6	May 3	May 14	May 3	May 9	May 3		May 16	May 0
Crested flycatcher	May 9	May 15	May 10	May 9		May 4	May 9	May 9	May 5	May 10	May 4	May 11	May 3		May 10	May 8
Phœbe	Mar. 17	Mar. 23	Mar. 19	Mar. 25	Mar. 16	Mar. 30	Apr. 18	Apr. 1	Apr. 9	Apr....	Mar. 31	Apr. 7	Apr. 4	Apr....	Apr. 2	Apr. 9
Wood pewee	May 10	May 10	May 21	May 19	May 16	May 15	May 6	May 20	May 26		May 13	May 13	May 18		May 21	May 18
Least flycatcher	Apr. 30	Apr. 26	May 1	May 6	May 3	May 5	May 6	May 7	May 11	May 8	Apr. 25	May 8	May 3		May 7	May 10
Bobolink	May 2	May 1	May 2	May 8	May 2	May 4	May 5	May 3	May 9	May 12	May 8	May 11	May 8	May 8	May 7	May 11
Cowbird		Apr. 1	Apr. 2	Mar. 25		Mar. 25	Mar. 24	Mar. 6	Mar. 15		Apr. 2	Apr. 21	Apr. 3		Mar. 18	May 2
Red-winged blackbird	Mar. 4	Feb. 20	Mar. 4	Mar. 2	Feb. 25	Feb. 28	Mar. 10	Mar. 2	Mar. 10	Apr. 22	Apr. 1	Apr. 20	Apr. 9	Apr. 1	Mar. 5	Mar. 29
Meadowlark			Apr. 2		Feb. 25	Mar. 3	Mar. 16	Mar. 3	Mar. 15	Apr. 17	Apr. 2	Apr. 14	Apr. 3		Mar. 27	Apr. 20
Baltimore oriole	May 2	May 7	May 2	May 5	May 2	May 3	May 5	May 4	May 5	May 10	May 2	May 8	May 4	May 9	May 10	May 10
Rusty blackbird			Mar. 26				Apr. 28	Apr. 5		Apr....	Apr. 1		Apr. 2			Apr. .
Crow blackbird					Mar. 13	Mar. 22	Mar. 20	Mar. 3	Mar. 25		Mar. 28	Apr. 6	Mar. 5	Mar. 29	Mar. 28	Mar. 31
Purple finch	Apr. 4	Apr. 25	Apr. 2		w....	Mar. 30	Apr. 18	Mar. 17	Mar. 31		Res....	Apr. 18	Apr. 18		Apr. 5	Apr. 22
Vesper sparrow	Apr. 2	Apr. 8	Apr. 7		Apr. 2	Apr. 7	Apr. 10	Apr. 2	Apr. 4	Apr....	Apr. 13	Apr. 20	Apr. 7		Apr. 5	Apr. 26
Savannah sparrow			Apr. 9		Apr. 6	Apr. 3	Apr. 21	Apr. 5	Apr. 11	Apr....	Apr. 27	Apr. 27	Apr. 13		Apr. 14	Apr. 26
White-crowned sparrow			May 9				May 5	May 9	May 9	May 5	May 10	May 12	May 8			May 10
White-throated sparrow			Apr. 9	Apr. 14	Apr. 17	Apr. 28	Apr. 26	May 8	May 5	Apr....	Apr. 17	Apr. 26	May 2		Mar. 20	Apr. 6
Chipping sparrow	Apr. 9	Apr. 19	Apr. 12	Apr. 14	Apr. 14	Apr. 13	Apr. 22	Apr. 7	Apr. 11		Apr. 12	Apr. 24	Apr. 21		Apr. 19	Apr. 26
Field sparrow	Mar. 23	Apr. 10	Apr. 2	Apr. 13	Apr. 13		Apr. 14	Apr. 8	Apr. 10							
Song sparrow	[a] Mar. 4	[a] Feb. 20	[a] Feb. 26	[a] Feb. 23	[a] Feb. 14	Mar. 15	Mar. 16	Mar. 8	Mar. 15	Apr....	Mar. 28	Apr. 10	Apr. 2	Mar. 8	Mar. 20	Apr....
Fox sparrow	Mar. 4	Apr. 3	Mar. 19	Mar. 4	Feb. 15	Apr. 8				May 5			Apr. 14		Mar. 31	
Towhee	Apr. 21	Apr. 26	Apr. 23	Apr. 22	May 3		Apr. 20				May 9					
Rose-breasted grosbeak	May 3	May 14	May 3		May 13	May 5	May 10	May 11	May 11	May 3	May 24	May 10	May 6		May 17	May 13
Indigo bird	May 9	May 9	May 18	May 13	May 14	May 12	May 12	May 11	May 13	May 2	May 19	May 24	May 24			May 22
Scarlet tanager	May 6	May 10	May 4	May 9	May 13	May 10	May 9	May 8	May 11	May 13	May 8	May 14	May 10			May 10
Purple martin		Apr. 26	Apr. 29	May 6					Apr. 23							
Cliff swallow						Apr. 22	Apr. 24	Apr. 30	Apr. 20	Apr....	Apr. 14	May 3	Apr. 20		May 3	Apr. 20
Barn swallow	Apr. 22	Apr. 22	Apr. 20	Apr. 28	Apr. 19	Apr. 14	Apr. 16	Apr. 18	Apr. 15	Apr....	Apr. 14	Apr. 20	Apr. 21		Apr. 10	Apr. 20
Tree swallow	Apr. 4		Apr. 20	Apr. 6	Apr. 6				Apr. 12	May 10	Apr. 18	May 2	May 28		Apr. 14	Apr. 8
Bank swallow	Apr. 22		Apr. 20			Apr. 21	Apr. 22	Apr. 27	Apr. 16		Apr...		May 5		May 22	May 10
Red-eyed vireo	May 5	Apr. 22	Apr. 29	May 9	May 14	May 12	May 11		May 11	May 23	May 14	May 20	May 4		May 10	May 14
Warbling vireo	May 8	May 3		May 12	May 8	May 6	May 8	May 10	May 3		May 10		May 14			May 10
Yellow-throated vireo	May 2	May 1	Apr. 30	May 5	May 2		May 9	May 13	May 5	May 12	May 9	May 14	May 7		May 12	May 14
Black and white warbler	Apr. 22	May 1	Apr. 23	May 5	May 1	Apr. 21	May 6	May 11	May 5		Apr. 24	May 7	May 12		May 23	
Nashville warbler		May 15	May 10		May 8		Apr. 26	May 8	May 5	May 10	Apr. 24					
Parula warbler	May 3	May 11	May 2	May 5	May 8			May 12		May 8	May 3	May 4			May 10	May 8
Yellow warbler	May 2	May 8	Apr. 30	May 13	May 7	May 2	May 3	Apr. 29	May 3	May 12	May 7	May 12	May 5		May 9	May 7
Black-throat, blue warbler	May 2	Apr. 26	May 5	May 8	May 10				May 12	May 10	May 7		May 7		May 22	May 11
Myrtle warbler	Apr. 15		Apr. 29	Apr. 13	May 1	Apr. 21	Apr. 27	Apr. 25	Apr. 28	May 2	Apr. 28	May 2	Apr. 21		Apr. 20	May 1
Magnolia warbler	May 9	May 12	May 20	May 8	May 13	May 14	May 10			May 21	May 21		May 13		May 21	May 23
Chestnut-sided warbler	May 2	May 12	May 13	May 8	May 13	May 5	May 0	May 11	May 12	May 13			May 4		May 23	May 11
Bay-breasted warbler		May 18			May 14		May 9			May 26			May 13			
Black-poll warbler	May 12	May 13	May 21		May 20		May 23	May 21							June 1	
Blackburnian warbler	May 16	May 19	May 10	May 13	May 14			May 8	May 12	May 14	May 9	Apr. 29			May 21	May 11
Black-throat, green warbler	May 2	Apr. 30	May 2	May 5	Apr. 28	May 8	May 4		May 5	May 13	Apr. 27				May 10	May 11
Palm warbler	Apr. 4	Apr. 23	Apr. 23	Apr. 14	Apr. 27				Apr. 21				May 1			
Ovenbird	May 2	May 1	Apr. 20	May 4	Apr. 27	May 10	May 9	May 2	May 5	May 8	May 3	May 8	May 4		May 10	May 8
Water-thrush	May 17	May 22	May 21	May 17				May 1		May 17						
Mourning warbler			May 29						May 12	May 28	May 24	May 22	May 24			May 31
Northern yellow-throat	May 5	May 10	May 2	May 14	May 5	May 12			May 11	May 13		May 24			May 22	May 16
Canadian warbler		May 13	May 21	May 18	May 6	May 12	May 10	May 8		May 14		May 15			May 22	May 23
American redstart	May 3	May 7	May 1	May 8	May 6	May 10	May 11	May 11	May 12	May 8	May 0	May 15	May 4		May 10	May 14
American pipit	Mar. 31								May 12	May 6	May 15	May 8	May 11			
Catbird	Apr. 29	Apr. 30	Apr. 20	May 4	May 2	May 5	May 8	May 3	May 10		May 23	Apr. 21	May 9		May 17	May 15
Brown thrasher	Apr. 22	Apr. 28	Apr. 23	Apr. 22	Apr. 27		May 3	Apr. 30		May 13	May 13		May 8		May 8	May 7
House wren	Apr. 24	Apr. 26	Apr. 25	Apr. 24	Apr. 30	May 3	May 10	May 6	May 4	May 5		Apr. 30				May 22
Winter wren		Feb. 27			Mar. 20					Apr. 13	Apr. 8	Apr. 16	Apr. 5		Apr. 12	Apr....
Ruby-crowned kinglet	Apr. 19	Apr. 23	Apr. 16	Apr. 18	Apr. 20	Apr. 24	Apr. 27	Apr. 24	Apr. 20		Apr. 17	Apr. 28	Apr. 15		May 5	Apr. 30
Wood thrush	Apr. 30	Apr. 30	Apr. 30	May 3	May 3	May 8	May 4	May 15	May 11							
Wilson thrush	Apr. 20	May 1	May 3	May 12	May 6	May 4	Apr. 28	May 8	May 7	May 6	May 10		May 6		May 10	May 14
Olive-backed thrush	May 2	May 3	May 11	May 14	May 17					May 23		May 15				May 23
Hermit thrush	Apr. 8	Apr. 22	Apr. 13	Apr. 8	Apr. 5	Apr. 17	Apr. 27	Apr. 24	Apr. 21		Apr. 9	Apr. 21	Apr. 9		Apr. 3	Apr. 13
American robin		Jan. 30	Feb. 12	Feb. 25	Jan. 23	Feb. 20	Mar. 7	Feb. 16	Mar. 2		Mar. 26	Mar....	Feb. 28	Mar. 18	Feb. 15	Mar. 15
Bluebird	[a]......	[a]......	Feb. 15	Feb. 25	Feb. 10	Feb. 26	Mar. 10	Feb. 20	Mar. 2	Apr. 17	Mar....	Mar. 12	Feb. 28	Mar. 20	Feb. 28	Mar. 21

[a] A few wintered.

PUBLISHED LOCAL LISTS

An immense volume of literature relating to the birds of New York State has accumulated during the 300 years which have elapsed since Hudson sailed into New York harbor. Casual references in the notes of early travelers and colonial writers; definite records in the works of Wilson, Audubon, Nuttall and other early ornithologists; numerous statements in the works of Baird, Brewer, Ridgway, Coues and a host of modern writers in America and some in Europe; many incidental records or bits of life histories in scientific and popular magazines, such as the *American Naturalist*, *Science*, *Scribner's*, *Forest and Stream*, and others; frequent accounts of local or general interest in the numberless newspapers of the State and adjacent territory, numerous references in government and museum reports and bulletins; and finally records in the *Auk*, *Osprey*, *Wilson Bulletin*, *Ornithologist and Oologist*, and other ornithological publications, all have contributed to the distribution, migration and habits of our birds as reported in the present volume. The work of *completing* the history and bibliography of New York ornithology has proved a task so seemingly endless, however, that its publication is deferred for the present. The author has found it impossible to assert with any degree of certainty who first added the different species of our common birds to the list of our avifauna. It is evident from the writings of Wilson and Audubon that most of our common birds were well known in New York during their time, and frequent references are made in their works to different species of water birds occurring on Long Island.

For the use of New York bird students we have deemed it advisable to publish a comparative summary of the principal bird lists referring specially to the New York fauna, beginning with Giraud and DeKay.

The *Birds of Long Island*, by J. P. Giraud jr, was published in 1844, by Wiley and Putnam, 161 Broadway, N. Y., and is an octavo volume of 397 pages, with descriptions and annotations of 286 species. Only about 200 copies of this book were printed. The author includes the Crested

grebe, Manx shearwater and Little stormy petrel, which are European species with no definite records for New York, though cited by most of the early writers. His records of Lestris parasiticus and L. richardsoni probably both refer to the Parasitic jaeger. His Canadian woodpecker may be the Northern hairy woodpecker, subspecies leucomelas, but no recent records or specimens are known. The Wood wren is now regarded the same as the House wren. Thus it is evident that Giraud treated 280 of our present list as occurring on Long Island.

The Zoology of New York, Part 2, Birds, by James E. DeKay, also appeared in 1844, published by the State Museum. This large quarto work includes 353 pages of text, with descriptions and brief histories, and 141 plates, showing 358 figures of native birds in colors. DeKay describes 309 species as belonging to New York or, like the Carolina paroquet, as having occurred here. Some species like the Magpie, Carolina titmouse, and Whistling warbler are admitted on supposition or hearsay evidence. The Wood wren and Hemlock warbler are not valid species, and the Crested grebe is European. This is the best known account of New York birds, although it has been evident for many years that important additions should be made to bring the knowledge of our ornithology to the present time. In the 64 years which have elapsed since DeKay's report, about 100 species have been added to the State list.

George N. Lawrence's *List of the Birds of New York and Vicinity*, which appeared in 1866 in the Proceedings of the Linnaean Society of New York, enumerates 327 species, but only a few are annotated. The Crested grebe, Common murre, Manx shearwater, Little stormy petrel, Tropical fulmar and Carolina chickadee appear without definite records and no New York specimens have been found in the Lawrence collection. The European woodcock and Red-cockaded woodpecker were entered as having occurred in neighboring parts of New Jersey, and the Hutchins gull, Green-backed mallard, Cooper sandpiper and Wood wren are not regarded as valid species. Thus Lawrence included 315 of our present list as New York species.

The Summer Birds of the Adirondacks in Franklin County, New York, by Theodore Roosevelt jr, and H. D. Minot, 1877, is a brief but satisfactorily annotated list of 97 species occurring in the Northern Adirondacks in the summer time. This is the first definite study of our Adirondack avifauna.

A List of the Birds of the Hudson Highlands with Annotations, by Dr Edgar A. Mearns appeared in the Bulletin of the Essex Institute, Salem, Mass., beginning in volume 10, 1878, and concluded in volume 13, 1882, with an addendum of four species published in the *Auk*, 1890. This is one of our very best lists, including records of migration, relative abundance, and food of the different species, together with a fine series of measurements of birds taken in this State. These dimensions have been a constant source of authority in the preparation of the present volume. It includes 213 species, 99 of which are recorded as breeding in the Highlands.

A Revised List of Birds of Central New York, from the observations of Frank R. Rathbun, Gilbert Fowler, Frank S. Wright and Samuel F. Rathbun, published at Auburn, N. Y., in 1879, is an admirable list of 236 species, of which 83 are reported as breeding in central New York. The birds named in this list are all admitted as New York species at the present time.

A Preliminary List of Birds Ascertained to Occur in the Adirondack Region, North Eastern New York, by C. Hart Merriam M.D., published in the *Auk*, 1881, with addenda in 1882–84, is a briefly annotated list of 211 species, with valuable notes on the fauna and flora of the region. This list, together with Dr Merriam's notes on Lewis county birds, published in the Bulletin of the Nuttall Ornithological Club, 1878 and 1879, constitutes the best account we have of the ornithology of the Adirondack region, containing much that is interesting on the natural history of some of our native birds.

A Review of the Summer Birds of a Part of the Catskill Mountains, with Prefatory Remarks on the Faunal and Floral Features of the Region, by Eugene Pintard Bicknell, published in the Transactions of the Linnaean Society of New York, in 1882, is another valuable faunal list treating of

90 species of birds found nesting in the Catskill region, with exhaustive remarks on the floral and faunal areas represented. This list of 54 pages gives us our first definite and reliable knowledge concerning the Canadian fauna which inhabits the summits of the Catskills.

Our Birds and Their Haunts, by Rev. J. H. Langille (Estes & Lauriat, Boston, 1884) is an extremely interesting volume devoted to the commoner native birds of the northeastern states. A large portion of the records refer to western New York where the author formerly resided.

Birds of Chautauqua County, by John M. Edson, is an address delivered before the Chautauqua Society of History and Natural Science, in Jamestown, N. Y., January 29, 1885. It is a briefly annotated list of 152 species.

A List of the Birds of Onondaga County, by Morgan K. Barnum, Syracuse University, 1886, is a reliable list of 204 species.

An Annotated List of the Birds of Oneida County, N. Y., and its Immediate Vicinity, by William L. Ralph M.D., and Egbert Bagg, Oneida Historical Society, volume 3, page 101, 1886, is an exhaustive and reliable list. Together with the additions which have appeared in the *Auk* up to 1900, the Oneida county list contains 248 species, of which 109 have been found breeding in that vicinity.

Birds of Niagara County, N. Y., by James L. Davison, appeared in *Forest and Stream*, in 1889, and names 204 species, with 93 breeding in the county.

A List of the Birds of Buffalo and Vicinity, by W. H. Bergtold, M. D., from the Bulletin of the Buffalo Naturalists Club, volume 1, number 7, 1889, mentions 237 species very briefly and gives 111 as breeding near Buffalo.

An Annotated List of the Birds Known to Occur within Fifty Miles of New York City, by Frank M. Chapman, American Museum of Natural History, 1894, and a revised edition of the same in the American Museum Journal, volume 6, numbers 2 and 3, 1906, names 348 species in the first edition and 353 in the second, besides three extirpated species, four species liberated but not established, one doubtful and not counted (Stormy petrel), and three forms not regarded as valid species. Mr Chapman's nesting and

migration dates are taken from his *Handbook of the Birds of Eastern North America*, and from *An Annotated List of the Birds Known to Breed within Fifty Miles of New York City*, Guide Leaflet 14, American Museum, 1904. 120 species are listed as breeding near New York.

A Catalogue of the Birds of Chemung County, by William H. Gregg M.D., 1891, mentions 200 species, but only 165 are accorded any definite records for Chemung county.

Birds of Western New York With Notes, by Ernest H. Short, Albion, 1896, records 289 species as occurring and 119 as breeding.

The list of the *Birds of Sing Sing, N. Y.*, by Dr A. K. Fisher, of the Biological Survey, Washington, D. C., is taken from Chapman's Handbook, 1898, and gives a very complete record of the migration dates for the lower Hudson valley. The number of birds in the list is 233.

Birds of Long Island, by William Dutcher, part of which appeared in Chapman's Handbook, 1898, gives the best dates we have for the migration of waterfowl and shore birds on the coast of the State. These notes, together with numerous records of Long Island birds, which have appeared from time to time in the *Auk* are included in these columns.

Mr Dutcher has kindly consented also to the use of his Long Island Notes consisting of three large volumes of records and a fourth containing complete data of all the specimens in his collection taken on Long Island, over 2000 specimens. These have furnished much more exhaustive migration dates than were obtained from his published notes.

Birds of Western New York, by Elon Howard Eaton, Proceedings of the Rochester Academy of Science, 1901, includes 319 species, of which 128 are known to breed. It gives the relative abundance, migration and nesting dates as well as the records for rare species, and also contains a chart to illustrate graphically the time and manner of occurrence of each species.

Birds of Madison County, N. Y., by George Charles Embody, Colgate University, 1901, is a very satisfactory list of 192 species, 75 of which are

known to breed. It mentions the relative abundance and time of arrival of the different birds. Stars in this list refer to William R. Maxon's review of Embody's publication, *Auk*, 20, 1903, p. 262-66.

A List of the Birds of Long Island, N. Y., by William C. Braislin, from the Proceedings of the Linnaean Society of New York for the year ending March 1907. This is a complete list of the birds known by Dr Braislin to occur on Long Island, including 364 species and giving a good series of migration dates and records of accidental visitants.

COUNTY SCHEDULES

These tables have been prepared to show in condensed form the status of our knowledge concerning the birds of each county in New York State. The information has been gathered from schedules and bulletins sent out from the State Museum by Dr Farr in 1900, and subsequently returned by numerous observers in all parts of the State, also from migration schedules and correspondence returned to the author in 1905, 1906 and 1907. The author's personal notes are largely embodied in the lists of Erie, Ontario, Monroe and Essex counties, his observations, begun at Springville in 1880, having been principally confined to western New York, but in part to the eastern and southeastern parts of the State. All reports received from any source have been given due consideration, but it has seemed advisable to omit numerous records of unusual birds because the reports were based on hearsay evidence or merely from having been seen, no absolute confirmation of the record being obtainable. Numerous records also, which have appeared in print, have not been included, because after careful investigation they were found to refer to some other species than that originally reported. At the same time, it is probable that some reports which have been omitted from these tables were of actual occurrences of the species named, but since they were of such an unusual nature it has seemed best to omit them when they were not substantiated by specimens or subsequent observations.

The author wishes to express his appreciation of the assistance which has been rendered to the State Museum by all those who have given their time and effort to the compilation of these county lists. For the guidance of students who may desire to know the source of our information, we append the following list of correspondents:

ALBANY COUNTY

George H. Chadwick, Canton
W. W. Judd, Albany
George Richard, Cody, Wyo.
Will Richard, Cody, Wyo.
Isaac H. Vrooman jr, Albany

ALLEGANY COUNTY

E. S. Gilbert, Canaseraga
F. S. Place, Alfred
A. C. Whitford, Alfred

BROOME COUNTY

W. N. Clute, Binghamton
John A. Dyer, Binghamton
Lillian Hyde, Binghamton
A. L. Reed (*deceased*)
Lillian Reed, Berkshire

CATTARAUGUS COUNTY

Fred R. Eaton, Olean
W. H. Eldredge, Leon
John W. Kales, Franklinville
Evelyn M. Moore, Olean

CAYUGA COUNTY

George C. Embody, Auburn
Matilda Jacobs, Aurora
Foster Parker, Cayuga
F. R. Rathbun, Auburn
Frederick J. Stupp, Auburn
E. G. Tabor, Meridian
F. S. Wright, Auburn

CHAUTAUQUA COUNTY

A. E. Kibbe, Mayville
Mrs R. R. Rogers, Jamestown
L. T. Sprague, Jamestown
Sarah Waite, Dunkirk

CHEMUNG COUNTY

Stella M. Lawrence, Elmira
R. L. Moss, Elmira
Fannie B. Rice, Elmira
Rufus Stanley, Elmira

CHENANGO COUNTY

F. H. Williams, Greene

CLINTON COUNTY

George C. Shattuck, Boston, Mass.

COLUMBIA COUNTY

Miss E. Sackett, East Chatham
Margaret R. Wilbur, Old Chatham

CORTLAND COUNTY

H. C. Higgins, Cincinnatus

DELAWARE COUNTY

W. E. Yager, Oneonta
William J. Youngs, Youngs

DUTCHESS COUNTY

Lispenard S. Horton, Gretna
Mary Hyatt, Stanfordville

ERIE COUNTY

Arthur A. Allen, Buffalo
Dr Carlos Cummings, Buffalo
E. H. Eaton, Springville
Florence A. Jones, Willink
E. F. Lein, Buffalo
John D. Macpherson, Buffalo
Edward Reinecke, Buffalo
Ottomar Reinecke, Buffalo
E. P. Reynolds, Buffalo
James Savage, Buffalo
Mathilde Schlegel, East Aurora
Charles H. Stevenson, Kenmore

ESSEX COUNTY

H. L. Achilles, Rochester
C. F. Batchelder, Cambridge, Mass.
J. H. Bradstreet, Rochester
W. Scott Brown, Elizabethtown
Dr C. A. Dewey, Rochester
Prof. C. W. Dodge, Rochester
E. H. Eaton, Canandaigua
George Fuller, Rochester
A. H. Kallies, Lake Placid
Jennie Kimball, Williamsville
Tom Taylor, Rochester
Edgar S. Tweedy, North Elba
Marcellus Wild, Rochester

FRANKLIN COUNTY

A. R. Fuller, Malone
F. Seymour Woodruff, Albany

FULTON COUNTY

Charles P. Alexander, Gloversville
Donald Frazer, Johnstown

GENESEE COUNTY

G. P. Clarkson, Buffalo
Prof. F. M. Comstock, Ithaca

GREENE COUNTY

Emily Becker, Catskill
George H. Chadwick, Canton

HAMILTON COUNTY

Egbert Bagg, Utica
C. J. Pennock, Kennett Square, Pa.
Dr William L. Ralph *(deceased)*

HERKIMER COUNTY

C. L. Avery, Herkimer
Egbert Bagg, Utica
J. R. Benton, Little Falls
G. S. Hardy, Littleville
Dr William L. Ralph (*deceased*)

JEFFERSON COUNTY

Minna C. Anthony, Watertown
L. C. Snyder, Lacona
William Hagedone, Woodville

KINGS, QUEENS AND NASSAU COUNTIES

G. B. Badger, Brooklyn
Dr William C. Braislin, Brooklyn
C. J. Brasher, Queens co.
G. K. Cherrie, Brooklyn
W. F. Hendrickson, Long Island City
Arthur H. Howell, Washington, D. C.
J. L. Shields, Floral Park
S. H. West, Flushing

LEWIS COUNTY

Dr C. Hart Merriam, Washington, D. C.
James H. Miller, Lowville

LIVINGSTON COUNTY

Prof. Guy S. Bailey, Geneseo
A. L. Thorne, Sonyea

MADISON COUNTY

G. C. Embody, Auburn
Oscar S. Gorton, West Bloomfield
Dorothy B. Leonard, Kenwood
S. A. Maxon, Oneida
William R. Maxon, Washington, D. C.
Gerrit S. Miller jr, Washington, D. C.

MONROE COUNTY

J. D. Archer, Hilton
David Bruce, Brockport
E. H. Eaton, Canandaigua
Francis Gott, Rochester
George F. Guelf, Brockport
Charles G. Presser, Rochester
Truman R. Taylor, Rochester

Also records of the Bird Section of the Rochester Academy of Science.

MONTGOMERY COUNTY

Donald Frazer, Johnstown

NEW YORK CITY

L. S. Foster (*deceased*)

Also published records of many observers.

NIAGARA COUNTY

J. L. Davison, Lockport
F. A. W. Dean, Effingham, Ill.

ONEIDA COUNTY

J. S. Allwood, Vernon
Egbert Bagg, Utica
Graham Bronson, Vernon
Dudley Dorn, Point Rock
A. R. Eastman, Waterville
A. S. Hopkins, Rome
W. B. Mann, Sangerfield
A. C. Weed, New Hartford
W. J. B. Williams, Holland Patent

ONONDAGA COUNTY

Dr W. M. Beauchamp, Syracuse
J. A. Dakin (*deceased*)
E. H. Johannot, Syracuse
A. W. Perrior, Syracuse

ONTARIO COUNTY

Frank T. Antes (*deceased*)
Maurice Blake, Canandaigua
B. S. Bowdish, Phelps
E. H. Eaton, Canandaigua
F. H. Hall, Geneva
D. Byron Waite, Springwater
Ernest Watts, Canandaigua
W. P. Wheeler, Geneva
Addison P. Wilbur, Canandaigua
Charles H. Wilder (*deceased*)

ORANGE COUNTY

F. A. Heiss, Port Jervis
Mary O. Lamb, Middletown
F. B. Robinson, Newburgh

ORLEANS COUNTY

Dana C. Gillett, Medina
C. F. Posson, Medina

OSWEGO COUNTY

Dr Newton Cook, Sandy Creek
Dr R. L. Crockett, Sandy Creek
O. J. Russell, Port Ontario
J. W. Soule, Sandy Creek
D. D. Stone, Lansing

OTSEGO COUNTY

J. J. Wood, Oneonta

PUTNAM COUNTY

W. A. Mead, Carmel

RENSSELAER COUNTY

Charles E. Chambers, Troy
Martin J. Conway, Lansingburg
Dr T. B. Heimstreet, Troy
W. C. Hitchcock, Cropseyville
A. F. Park (*deceased*)
F. S. Webster, Pittsburg, Pa.

RICHMOND COUNTY

Wm. P. Heineken, New Brighton

ROCKLAND COUNTY

L. W. Brownell, Nyack

ST LAWRENCE COUNTY

W. A. Newell, Ogdensburg
Mary B. Sherman, Ogdensburg

SARATOGA COUNTY

A. S. Brower, Ballston Spa
S. R. Ingersoll, Ballston Spa
Will Richard, Cody, Wyo.

SCHENECTADY COUNTY

James E. Benedict, Washington, D. C.

SCHOHARIE COUNTY

Dr D. Norwood, Esperance

SENECA COUNTY

C. J. Hampton, Cosad
Foster Parker, Cayuga

STEUBEN COUNTY

George B. Hollister, Corning
Mrs George B. Hollister, Corning
A. H. Wood, Painted Post

SUFFOLK COUNTY

W. A. Babson, Bellport
O. W. Degen, Plum Island
A. H. Helme, Miller's Place
Mrs A. W. Lowerre, Southold
James G. Scott, Montauk
W. W. Worthington, Shelter Island

TIOGA COUNTY

Earl D. Hammond, Sayre, Pa.
J. Alden Loring, Owego

TOMPKINS COUNTY

A. A. Allen, Buffalo
L. A. Fuertes, Ithaca
Francis Harper, Ithaca
Dr H. D. Reed, Ithaca
A. C. Weed, Ithaca
A. H. Wright, Ithaca

ULSTER COUNTY

E. P. Bicknell, New York
John Burrows

WARREN COUNTY

Anna Cheney, Glens Falls
Dr A. K. Fisher, Washington, D. C

WASHINGTON COUNTY

Stewart H. Burnham, Vaughns
F. T. Pember, Granville

WAYNE COUNTY

B. S. Bowdish, Phelps
Mary S. Eames, Newark

WESTCHESTER COUNTY

L. V. Case, Bedford
Dr A. K. Fisher, Washington, D. C.
Gerald H. Thayer, Monadnock, N. H.

WYOMING COUNTY

Rev. J. C. Warren, Pike

YATES COUNTY

Verdi Burtch, Branchport
Rev. E. C. Hull, Dresden
Clarence N. Davis, Branchport
Louise Sumner, Crosby
C. F. Stone, Branchport

The abbreviations used in the first column of each county list classify the birds under the following heads. *Residents* (res) are those species which are found at all seasons of the year and breed within the county. *Summer residents* (sr) spend only the warmer part of the year in the county, coming from the south in the spring, returning to the south to pass the winter. *Transient visitants* (tv) are species which merely pass through the county in the spring or fall, or both, on the way to their breeding grounds. *Winter visitants* (wv) are those which come from their homes in the north to pass the winter with us. *Summer visitants* (sv) are species which breed farther south but visit us in considerable numbers during the summer after the breeding season is over. *Accidental visitants* (av) are species which live so far from our borders, and are found here so rarely, that their occurrence may be regarded as accidental.

In the second column the relative abundance of species is indicated by the terms *Abundant* (ab), applied to such birds as the Robin and Song sparrow, which are very common in the locality. *Common* (c) indicating a less degree of abundance. *Fairly common* (fc) birds are such as are found in limited numbers at the proper place and season, like the Scarlet tanager, or Migrant shrike in western New York. *Uncommon* (unc) birds are such as can not be called rare and yet are of unusual occurrence. Birds of *Occasional occurrence* (oc) are those which are not observed each season but appear at intervals of a few years. A *rare* bird is one which has been recorded only a few times and yet can not be regarded as accidental. We have also found it convenient in these tables to use such expressions as *local*, referring

ab=abundant; ac=accidental; av=accidental visitant; c=common; fc=fairly common; irreg=irregular; oc=occasional; reg=regular; res=

In columns headed "Resident or transient" and "Common or rare," where two or more abbreviations occur, the first, second and third abbreviations respectively i *res; very ab, fc,* should be read "transient visitant, very abundant; resident, fairly common." When two abbreviations occur in the first column and but one in the second c fairly common; transient visitant, fairly common."

SPECIES RECORDED	GIRAUD, LONG ISLAND, 1844					DE KAY, NEW YORK STATE, 1844
	Resident or transient	Common or rare	Leaves for north	Returns from north	Breeds	Resident or transient
Holboell grebe	wv	oc				(Reported as Podiceps cristatus & rubricollis). Rare in winter
Horned grebe	wv, tv	fc				June to Nov. Breeds
Pied-billed grebe	sr	c				Common late summer & autumn. Breeds far north
Loon	wv					Resident. Breeds, Lake Raquet
Black-throated loon						
Red-throated loon	wv	oc				Comparatively rare
Puffin	wv	rare				Uncommon winter visitant on coast
Black guillemot	x					Occasionally in winter on coast
Brünnich murre	(wv)					(Reported as Uria troile). Occasionally in winter on coast
Razor-billed auk	wv	oc				Uncommon in winter on coast
Dovekie	wv	oc				Rarely seen on coast
Skua						
Pomarine jæger		very rare				wv. Not uncommon
Parasitic jæger		unc				wv. Four specimens. (Lestris richardsonii)
Long-tailed jæger		once				Once. (Lestris buffoni)
Ivory gull						
Kittiwake		unc				Rare south of N. Y
Glaucous gull	wv	young rare				
Iceland gull						
Kumlien gull						
Great black-backed gull	wv	fc				In winter to L. I. & Great Lakes
Herring gull	wv	c				Autumn, winter & spring on coast & Great Lakes
Ring-billed gull	tv	c				Winter visitor
Laughing gull	sr	c, breeds				Coast & Great Lakes. Breeds
Bonaparte gull		unc, young c, irreg				One of our most common species
Little gull						
Sabine gull		once, July '37				Rarely observed
Gull-billed tern		rare				Rare on coast, more frequent on Great Lakes
Caspian tern						
Royal tern	sv	unc				(Cayenne tern). Sparingly on coast
Cabot tern	ac. v	not frequent				
Trudeau tern						Little noticed on our coast. Occurs in N. Y.
Forster tern						
Common tern	sr	ab, breeds				Great numbers on coast & inland lakes. Arrives Apr. 15. Breeds
Arctic tern						Occasionally here
Roseate tern		unc				Not common on this coast
Least tern	sr	c				(Silvery tern). Coast & Great lakes
Sooty tern						
Black tern		fc				Prefers marshes in interior. Breeds?
Black skimmer	sv	unc				Common. Summer visitor
Cory shearwater						
Greater shearwater		very rare				Occasionally on coast
Audubon shearwater	straggler	oc				(Little shearwater). Northwardly to N. Y
Sooty shearwater						
Black-capped petrel						
Scaled petrel						
Leach petrel		rare				Occasionally on coast
Wilson petrel	straggler	oc				Commonly along our coast
Yellow-billed tropic-bird						
Booby						
Gannet	wv	rare				Ranges along coast
Cormorant	tv					Rarely on coast
Double-crested cormorant	wv					More frequently than the preceding
American white pelican						Formerly numerous on Hudson, has now disappeared
Brown pelican						One taken off Sandy Hook
Man-o'-war bird						
American merganser	wv	ab	spring	fall, late		On coast in autumn, some remain through winter. Breeds throughout interior
Red-breasted merganser	wv	unc				Breeds in interior of State
Hooded merganser		rather rare				Less common than the two preceding. Breeds in interior
Mallard		unc				Common on lakes & seacoast
Black duck	sr, wv	fc, c			May 19	Very abundant in this State. Breeds
Gadwall		rare, 1834				Rather rare in this State. Breeds
Widgeon		once, 3 Dec. '42				Three or four shot on Long Island
Baldpate		unc				Spring & autumn. Breeds. Not common
European teal						
Green-winged teal	tv	ab		Oct., late		Common. Breeds on Great Lakes
Blue-winged teal	tv			Sept	yes	Abundant on Hudson in Sept. Breeds, L. I
Cinnamon teal						
Shoveler		unc				Not abundant. Winter & spring
Pintail	tv	c				Abundant on shores of Lake Ontario. Less common on coast
Wood duck	sr	c				During summer only
Rufous-crested duck						
Redhead		fc	Mar., early	Nov. 1		wv. Less common than Canvas-back
Canvasback		fc		Nov. 1		Sparingly on Hudson & coast
American scaup duck	tv	c		Oct. 10-20		Spring & fall visitant
Lesser scaup duck	tv	ab				Very common on coast. Prefers lesser streams of interior
Ring-necked duck	tv	unc				tv. Coast. wv. Interior
American golden-eye	tv	unc				wv. Coast & interior
Barrow golden-eye						
Buffle-head	tv		Apr., late	Oct		Autumn, winter & spring
Old squaw	wv	c				One of most common wv
Harlequin duck		young only				Rare on shores of N. Y. Winter
Labrador duck		rather rare				Well known on this coast. Not very abundant
American eider		oc				In very severe winters along shores of State
King eider		twice, young oc				Very rarely as low as shores of this State
American scoter		c				By no means as common as surf scoter
White-winged scoter	wr	ab	Apr. 15	Oct. 15		In large flocks, from Oct. to Apr
Surf scoter	wr	ab	Apr. 15	Oct. 15		Very common on coast during winter
Ruddy duck		rare				Rather rare on this coast
Lesser snow goose						
Greater snow goose		unc				Not very abundant on coast of this State
Blue goose						(Confused with the preceding)
Am. white-fronted goose		very rare				Very rare in this State
Canada goose	tv	c	Apr., early	fall, late		Large flocks in autumn till bays are frozen. Returns in early spring
Hutchins goose		fc				Not uncommon on eastern part of L. I
White-bellied brant	tv	ab	May, late	Oct. 15		In great numbers on coast, early Oct. till Dec., again in Apr. & May
Black brant						
Barnacle goose						
Whistling swan		oc				Remains during whole year in Hamilton & Herkimer co
Trumpeter swan						
White ibis		twice				Appears at long intervals on coast
Glossy ibis						Have been killed in vicinity of New York
White-faced glossy ibis						

sr=summer resident; sv=summer visitant; tv=transient visitant; unc=uncommon; wr=winter resident, wv=winter visitant; x=occurs

umn should be read together. Thus: *tv, wv* in first column and *ab, oc* in second column, should be read "transient visitant, abundant; winter visitant, occasional;" *tv* h of the abbreviations in the first column is to be read with that in the second, i. e. *wv, tv* in first column and *fc* in second column should be read: "winter visitant

NCE, TC. 5	ROOSEVELT & MINOT, FRANKLIN COUNTY, 1877			MEARNS, HUDSON HIGHLANDS, 1879–1890					RATHBUN, CENTRAL NEW YORK, 1879				
rs	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Returns from north	Breeds
				tv, wv	ab at times						4 Mar. '76		
				tv, wv	ab oc				tv	c			
		rare, c 1875		tv, sr	ab oc				tv, sr	c, unc			
				tv	c				tv	fc			
					twice	14 Nov. '76				fc			
										rare			
		rare	yes										
				wv	ab					c			
				wv	oc					rare			
				sv	3 times								
				wv	ab, fall				tv	fc			
							15 Nov. '74						
					once					unc			
										rare			
						13 Sept. '78				rare	20 Sept. '76		
				tv		11 Sept. '79				rare			
					twice	10 Oct. '83	4 Nov. '89					15 Nov. '77	
												30 Nov. '65	
				wv	c				wv, sr	c, rare			
	sr		yes	tv, wv	very ab				tv, wv	c, unc			
				wv	c				tv, wv	c, unc			
				tv					tv	fc			
	sr		yes	tv, res	very ab, fc			yes	sr, wv	unc			yes
				tv					tv				
				tv	c				tv	fc			
				tv	ab				tv	c			
				tv	ab				tv, sr	ab, unc			
				tv					tv	unc			
				tv	fc				tv				
				sr				yes	sr	c			yes
				tv	c at times	23 Oct. '77			tv	fc			
				tv, wv	fc				tv	fc			
				tv, wv	very ab				tv	c			
				tv, wv	c				tv	c			
				tv	oc				tv	unc			
				tv, wv	very ab				wv	c			
				tv	very c				tv, wv	c, oc			
				tv, wv	very ab				tv	fc			
									wv	ac		Feb. '73	
									wv			20 Jan. '77	
				tv	very ab				tv	rare			
				tv, wv	very ab, oc								
				tv	ab				tv	fc, autumn			
				tv	ab				tv	fc			
					once								
				tv	ab				tv	c			
				tv									
				tv	oc		21 Oct. '80						
										ac			

ao=abundant; ac=accidental; av=accidental visitant; c=common; fc=fairly common; irreg=irregular; oc=occasional; reg=regular; res=resident; sr=summer resident; sv=summer visitant; tv=transient visitant; unc=uncommon; wr=winter resident, wv=winter visitant; x=occurs

In columns headed "Resident or transient" and "Common or rare," where two or more abbreviations occur, the first, second and third abbreviations respectively in each column should be read together. Thus: *tv, wv* in first column and *ab, oc* in second column, should be read "transient visitant, abundant; winter visitant, occasional;" *tv, res; very ab, fc*, should be read "transient visitant, very abundant; resident, fairly common." When two abbreviations occur in the first column and but one in the second column, each of the abbreviations in the first column is to be read with that in the second, i. e. *wv, tv* in first column and *fc* in second column should be read: "winter visitant, fairly common; transient visitant, fairly common."

SPECIES RECORDED	GIRAUD, LONG ISLAND, 1844					DE KAY, NEW YORK STATE, 1844	LAWRENCE, N. Y. ETC. 1866	ROOSEVELT & MINOT, FRANKLIN COUNTY, 1877			MEARNS, HUDSON HIGHLANDS, 1879–1890					RATHBUN, CENTRAL NEW YORK, 1879				
	Resident or transient	Common or rare	Leaves for north	Returns from north	Breeds	Resident or transient	Occurs	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Returns from north	Breeds
Holboell grebe	wv	oc				(Reported as Podiceps cristatus & rubricollis). Rare in winter.	x				tv, wv	ab at times						4 Mar. '76		
Horned grebe	wv, tv	fc				June to Nov. Breeds	x				tv, wv	ab oc				tv	c			
Pied-billed grebe	sr	c				Common late summer & autumn. Breeds far north	x		rare, c 1877		tv, sr	ab oc				tv, sr	c, unc			
Loon	wv					Resident. Breeds, Lake Raquet	x				tv	c				tv	fc			
Black-throated loon							x													
Red-throated loon	wv	oc				Comparatively rare	x					twice	14 Nov. '76				fc			
Puffin	wv	rare				Uncommon winter visitant on coast	x													
Black guillemot	x					Occasionally in winter on coast	x													
Brunnich murre	(wv)					(Reported as Uria troile). Occasionally in winter on coast	x													
Razor-billed auk	wv	oc				Uncommon in winter on coast	x													
Dovekie	wv	oc				Rarely seen on coast	x													
Skua																				
Pomarine jæger		very rare				wv. Not uncommon	x													
Parasitic jæger		unc				wv. Four specimens. (Lestris richardsonii)	x													
Long-tailed jæger		once				Once. (Lestris buffoni)	x													
Ivory gull																				
Kittiwake		unc				Rare south of N. Y	x													
Glaucous gull	wv	young rare					x										rare			
Iceland gull																				
Kumlien gull																				
Great black-backed gull	wv	fc				In winter to L. I. & Great Lakes	x													
Herring gull	wv	c				Autumn, winter & spring on coast & Great Lakes	x		rare	yes										
Ring-billed gull	tv	c				Winter visitor	x				wv	ab					c			
Laughing gull	sr	c, breeds				Coast & Great Lakes. Breeds	x				wv	oc					rare			
Bonaparte gull		unc, young c, irreg				One of our most common species	x				sv	3 times								
Little gull											wv	ab, full				tv	fc			
Sabine gull		once, July '37				Rarely observed	x													
Gull-billed tern		rare				Rare on coast, more frequent on Great Lakes	x													
Caspian tern							x													
Royal tern	sv	unc				(Cayenne tern). Sparingly on coast	x													
Cabot tern	ac. v	not frequent																		
Trudeau tern						Little noticed on our coast. Occurs in N. Y	N. J													
Forster tern														15 Nov. '74						
Common tern	sr	ab, breeds				Great numbers on coast & inland lakes. Arrives Apr. 15. Breeds	x													
Arctic tern						Occasionally here	x					once					unc			
Roseate tern		unc				Not common on this coast	x													
Least tern	sr	c				(Silvery tern). Coast & Great lakes	x										rare			
Sooty tern																	rare			
Black tern		fc				Prefers marshes in interior. Breeds?	x						13 Sept. '78					10 Sept. '76		
Black skimmer	sv	unc				Common. Summer visitor	x				tv		11 Sept. '79				rare			
Cory shearwater																				
Greater shearwater		very rare				Occasionally on coast	x													
Audubon shearwater	traggler	oc				(Little shearwater). Northwardly to N. Y	x													
Sooty shearwater																				
Black-capped petrel																				
Scaled petrel																				
Leach petrel		rare					x													
Wilson petrel	straggler	oc				Occasionally on coast	x													
Yellow-billed tropic-bird						Commonly along our coast	x													
Booby																				
Gannet	wv	rare																		
Cormorant	tv					Ranges along coast	x											15 Nov. '77		
Double-crested cormorant	wv					Rarely on coast	x											30 Nov. '68		
American white pelican						More frequently than the preceding	x					twice	10 Oct. '83	4 Nov. '80						
Brown pelican						Formerly numerous on Hudson, has now disappeared	x													
Man-o'-war bird						One taken off Sandy Hook														
American merganser	wv	ab	spring	fall, late			x				wv	c				wv, sr	c, rare			
Red-breasted merganser	wv	unc				On coast in autumn, some remain through winter. Breeds throughout interior	x	sr		yes	tv, wv	very ab				tv, wv	c, unc			
Hooded merganser		rather rare				Breeds in interior of State	x				wv	c				tv, wv	c, unc			
Mallard		unc				Less common than the two preceding. Breeds in interior	x				tv					tv	fc			
Black duck	sr, wv	fc, c				Common on lakes & seacoast	x	sr		yes	tv, res	very ab, fc			yes	sr, wv	unc			yes
Gadwall		rare, 1834			May 19	Very abundant in this State. Breeds	x				tv					tv				
Widgeon		once, 3 Dec. '42				Rather rare in this State. Breeds	x													
Baldpate		unc				Three or four shot on Long Island	x									tv	fc			
European teal						Spring & autumn. Breeds. Not common	x				tv	c								
Green-winged teal	tv	ab														tv	c			
Blue-winged teal	tv			Oct, late		Common. Breeds on Great Lakes	x				tv	ab				tv, sr	ab, unc			
Cinnamon teal				Sept	yes	Abundant on Hudson in Sept. Breeds, L. I	x				tv	ab								
Shoveler		unc														tv	unc			
Pintail	tv	c				Not abundant. Winter & spring	x				tv					tv				yes
Wood duck	sr	c				Abundant on shores of Lake Ontario. Less common on coast	x				tv	fc			yes	sr	c			
Rufous-crested duck						During summer only	x				sr									
Redhead		fc	Mar., early	Nov. 1			x									tv	fc			
Canvasback		fc		Nov. 1		wv. Less common than Canvas-back	x				tv	c at times	23 Oct. '77			tv	fc			
American scaup duck	tv	c		Oct. 10-20		Sparingly on Hudson & coast	x				tv, wv	fc				tv	c			
Lesser scaup duck	tv	ab				Spring & fall visitant	x				tv, wv	very ab				tv	c			
Ring-necked duck	tv	un				Very common on coast. Prefers lesser streams of interior	x				tv, wv	c				tv	unc			
American golden-eye	tv	un				tv. Coast. wv. Interior	x				tv	oc				wv	c			
Barrow golden-eye						wv. Coast & interior	x				tv, wv	very ab								
Buffle head	tv															tv, wv	c, oc			
Old squaw	wv	c	Apr., late	Oct		Autumn, winter & spring	x				tv	very c				tv	fc			
Harlequin duck		young only				One of most common wv	x				tv, wv	very ab								
Labrador duck		rather rare				Rare on shores of N. Y. Winter	x													
American eider		oc				Well known on this coast. Not very abundant	x									wv	a		Feb. '71	
King eider		twice, young oc				In very severe winters along shores of State	x									wv			20 Jan. '77	
American scoter		c				Very rarely as low as shores of this State	x									tv	rare			
White-winged scoter	wr	ab	Apr. 15	Oct. 15		By no means as common as surf scoter	x				tv	very ab								
Surf scoter	wr	ab	Apr. 15	Oct. 15		In large flocks, from Oct to Apr	x				tv, wv	very ab, oc				tv	fc, autumn			
Ruddy duck		rare				Very common on coast during winter	x				tv	ab				tv	fc			
Lesser snow goose						Rather rare on this coast	x				tv	ab								
Greater snow goose		unc																		
Blue goose							L. I					once								
Am white fronted goose	tv	very rare				Not very abundant on coast of this State	x									tv	c			
Canada goose	tv	c				(Confused with the preceding)	x													
Hutchins goose		fc	Apr., early	fall, late		Very rare in this State	x				tv	ab								
White bellied brant	tv	ab				Large flocks in autumn till bays are frozen. Returns in early spring	x													
Black brant			May, late	Oct. 15		Not uncommon on eastern part of L. I	L. I				tv									
Barnacle goose						In great numbers on coast, early Oct. till Dec., again in Apr. & May	x													
Whistling swan		oc												21 Oct. '80			ac			
Trumpeter swan											tv	oc								
White ibis		twice				Remains during whole year in Hamilton & Herkimer co	x													
Glossy ibis																				
White-faced glossy ibis						Appears at long intervals on coast	x													
						Have been killed in vicinity of New York	x													

SPECIES RECORDED	MERRIAM, ADIRONDACK REGION, 1881–1884				BICKNELL, CATSKILLS, 1882			LANGILLE, OUR BIRDS IN THEIR HAUNTS, 1884				
	Resident or transient	Common or rare	Departs for south	Breeds	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Return from north
Holboell grebe	tv											
Horned grebe	tv	oc						tv	c			
Pied-billed grebe	sr	c						sr				
Loon	sr	c						tv	c			
Black-throated loon												
Red-throated loon	tv											
Puffin												
Black guillemot												
Brünnich murre												
Razor-billed auk												
Dovekie												
Skua												
Pomarine jæger												
Parasitic jæger												
Long-tailed jæger												
Ivory gull												
Kittiwake												
Glaucous gull		once										
Iceland gull	wv	rare										
Kümlien gull												
Great black-backed gull												
Herring gull	res	c		yes				wv				
Ring-billed gull												
Laughing gull												
Bonaparte gull	tv							tv	ab at times			
Little gull												
Sabine gull												
Gull-billed tern												
Caspian tern												
Royal tern												
Cabot tern												
Trudeau tern												
Forster tern												
Common tern												
Arctic tern												
Roseate tern												
Least tern												
Sooty tern		once, 6 Sept. '76										
Black tern		once, 18 Aug. '76										
Black skimmer												
Cory shearwater												
Greater shearwater												
Audubon shearwater												
Sooty sherwater												
Black-capped petrel												
Scaled petrel												
Leach petrel												
Wilson petrel												
Yellow-billed tropic-bird								av	Sept. '76			
Booby												
Gannet	av											
Cormorant												
Double-crested cormorant		once	24 Sept. '79					tv	oc			
American white pelican												
Brown pelican												
Man-o'-war bird												
American merganser	sr	c		yes				tv	ab	Apr	May	
Red-breasted merganser	tv											
Hooded merganser	sr	fc			sr	rare	yes	tv	c			
Mallard	tv	rare						tv, res	ab, oc	Mar		Sept
Black duck	sr	fc			sr			tv	rare			
Gadwall		rare										
Widgeon								tv	c	Apr		Sept
Baldpate		rare										
European teal								tv				
Green-winged teal		unc						tv	c	Apr	May	Sept. 10
Blue-winged teal	tv											
Cinnamon teal								tv	unc			
Shoveler		rare						tv	c	Apr		Sept
Pintail	tv	rather rare						sr, breeds				
Wood duck	sr	fc			sr							
Rufous-crested duck								tv	c	Mar. 30		Oct
Redhead		rare						wv	oc			
Canvasback	tv, fall	rare						tv	c			
American scaup duck	tv	unc										
Lesser scaup duck	tv							tv	unc			
Ring-necked duck								wv			May 20	
American golden-eye	sr			yes								
Barrow golden-eye								tv, wv	c, oc	Apr		Oct
Buffle-head		unc						wv	c			
Old squaw	tv											
Harlequin duck												
Labrador duck									oc			
American eider									oc			
King eider								tv	in fall			
American scoter	tv, fall							tv	c			Sept. 20
White-winged scoter	tv, fall	c						tv	fc, in fall			
Surf scoter	tv, fall	fc						tv	c			
Ruddy duck												
Lesser snow goose												
Greater snow goose		once	19 Nov. '81									
Blue goose												
Am. white-fronted goose								tv	c	Mar. 15	May 1	
Canada goose	tv											
Hutchins goose												
White-bellied brant												
Black brant												
Barnacle goose												
Whistling swan	sr							tv	oc			
Trumpeter swan												
White ibis												
Glossy ibis												
White-faced glossy ibis												

CHAUTAUQUA NTY, 1886		BARNUM, ONONDAGA COUNTY, 1886					RALPH AND BAGG, ONEIDA COUNTY, 1886–1900				DAVISON, NIAGARA COUNTY, 1889		
t	Common or rare	Resident or transient	Common or rare	Arrives from south	Returns from north	Breeds	Resident or transient	Common or rare	Arrives from south	Returns from north	Resident or transient	Common or rare	Arrives from south
		tv	c	Apr. 9				once				once	8 May '89
		tv	ab				tv	fc			tv, sr	c, local	
	c	tv	c					fc				c, breeds	
	fc	tv	c				tv, sr	c local			tv, sr	c, local	
		tv	oc, rare				tv	oc		Oct.		twice	
							wv	three		Dec. '94		rare	
							once			22 Aug. '86			
								once		9 Nov. '90			
	rare											once	11 Feb. '86
	fc	tv	c				tv, sr	c, local			res	c	
	c	tv	c				tv	c			tv	c	
											tv	c, spring	
								rare					31 May '86
								once					
		tv	rare	May 22			tv	oc	Apr. '93				
							straggler	once, '93					
							straggler		28 Aug. '93				
												once	Oct. '75
		tv	rare					3 times		13 Oct. '90			
		tv	rare		30 Nov. '65							once	5 Nov. '94
		tv	c	Mar. 22			tv	fc			tv	c	
		tv	c	Mar. 18			sr	c			tv	unc	
	c	tv	c	Mar. 25			tv	c			tv	c	
	c, oc	tv	c	Apr. 8			tv	c			tv	c	
	c, c	tv	ab, spring	Mar. 18		yes	tv, sr	c			tv	c	
								oc	Apr.	Oct.			
	fc	tv	c				tv	fc				once	
	fc	tv	fc	Apr. 29			tv	c			tv	c	
	c	tv					tv	c			tv	c	
		tv	rare	Apr. 7, Mar. 31				twice	19 Apr. '84	Sept. '79		once	Oct. '85
	fc	tv	c				tv	c				unc	
	c, oc	sr	c	Apr. 2		yes	tv, sr	c			tv, sr	c, rare	
	c	tv	c	Mar. 29			tv				tv	c	
		tv	fc					once				rare	
	fc	tv	ab	Mar. 22			tv	c				rare	
	unc	tv	fc	Mar. 29			tv	c				fc	
	c	tv, wv	ab, unc	Mar. 29		once, yes	tv	c				c	
	c	tv	ab	Mar. 25			tv	c			tv	c	
	fc	tv	ab	Apr. 9			tv	rare		27 Oct. '81		ab	
		wv	ac		30 Jan. '77		tv	rare					
	fc	tv	c					oc			tv	unc	
		tv	rare					c			tv	c	
								once, '84					
	fc	tv	ab				tv	fc					
	fc	tv	c	Apr. 8			tv	c			tv	c	
								once		30 Oct. '91			
	rare							oc	13 Mar. '90		tv	unc	30 Mar. '89

SPECIES RECORDED	MERRIAM, ADIRONDACK REGION, 1881–1884				BICKNELL, CATSKILLS, 1882			LANGILLE, OUR BIRDS IN THEIR HAUNTS, 1884					EDSON, CHAUTAUQUA COUNTY, 1886		BARNUM, ONONDAGA COUNTY, 1886					RALPH AND BAGG, ONEIDA COUNTY, 1886–1900				DAVISON, NIAGARA COUNTY, 1889		
	Resident or transient	Common or rare	Departs for south	Breeds	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Resident or transient	Common or rare	Resident or transient	Common or rare	Arrives from south	Returns from north	Breeds	Resident or transient	Common or rare	Arrives from south	Returns from north	Resident or transient	Common or rare	Arrives from south
Holboell grebe	tv																									
Horned grebe	tv	oc						tv	c						tv	c	Apr. 9				once					
Pied-billed grebe	sr	c						sr							tv	ab				tv	fc				once	8 May '89
Loon	sr	c						tv	c					c	tv	c					fc			tv, sr	c, local	
Black-throated loon														fc	tv	c				tv, sr	c local				c, breeds	
Red-throated loon	tv																							tv, sr	c, local	
Puffin															tv	oc, rare				tv	oc		Oct.			
Black guillemot																									twice	
Brünnich murre																										
Razor-billed auk																				wv	three		Dec. '94			
Dovekie																									rare	
Skua																										
Pomarine jæger																										
Parasitic jæger																										
Long-tailed jæger																				once			22 Aug. '86			
Ivory gull																										
Kittiwake																										
Glaucous gull		once																			once		9 Nov. '90			
Iceland gull	wv	rare																								
Kumlien gull																										
Great black-backed gull																										
Herring gull	res	c		yes										rare												
Ring-billed gull								wv						fc	tv	c				tv, sr	c, local				once	11 Feb. '86
Laughing gull																								res	c	
Bonaparte gull	tv																									
Little gull								tv	ab at times					c	tv	c				tv	c			tv	c	
Sabine gull																										
Gull-billed tern																										
Caspian tern																										
Royal tern																										
Cabot tern																										
Trudeau tern																										
Forster tern																										
Common tern																								tv	c, spring	
Arctic tern																					rare					
Roseate tern																										
Least tern																					once					11 May '86
Sooty tern		once, 6 Sept. '76																								
Black tern		once, 18 Aug. '76																								
Black skimmer															tv	rare	May 22			tv	oc	Apr. '93				
Cory shearwater																				straggler	once, '93					
Greater shearwater																										
Audubon shearwater																										
Sooty shearwater																										
Black-capped petrel																										
Scaled petrel																				straggler		28 Aug. '93				
Leach petrel																										
Wilson petrel																										
Yellow-billed tropic-bird																										
Booby								av	Sept. '76																once	Oct. '75
Gannet	av																									
Cormorant																										
Double-crested cormorant		once	24 Sept. '79												tv	rare										
American white pelican															tv	rare		30 Nov. '65			3 times		13 Oct. '90			
Brown pelican								tv	oc																	
Man-o'-war bird																									once	5 Nov. '94
American merganser	sr	c																								
Red-breasted merganser	tv			yes																						
Hooded merganser	sr	fc						tv	ab	Apr.	May				tv	c	Mar. 22			tv	fc			tv	c	
Mallard	tv	rare			sr	rare	yes								tv	c	Mar. 18			sr	c			tv	unc	
Black duck	sr	fc						tv	c				wv	c	tv	c	Mar. 25			tv	c			tv	c	
Gadwall		rare			sr			tv, res	ab, oc	Mar.		Sept.	wr	c, oc	tv	c	Apr. 8			tv	c			tv	c	
Widgeon								tv	rare					c, c	tv	ab, spring	Mar. 18		yes	tv, sr	c			tv	c	
Baldpate		rare																			oc	Apr.	Oct.			
European teal								tv	c	Apr.		Sept.		fc	tv	c				tv	fc				once	
Green-winged teal		unc																								
Blue-winged teal	tv							tv						fc	tv	fc	Apr. 29			tv	c			tv	c	
Cinnamon teal								tv	c	Apr.	May	Sept. 10		c	tv					tv	c			tv	c	
Shoveler		rare																								
Pintail	tv	rather rare						tv	unc						tv	rare	Apr. 7, Mar. 31				twice	19 Apr. '84	Sept. '79		once	Oct. '85
Wood duck	sr	fc						tv	c	Apr.		Sept.	tv, sr	fc	tv	c				tv	c				unc	
Rufous-crested duck					sr			sr, breeds						c, oc	sr	c	Apr. 2		yes	tv, sr	c			tv, sr	c, rare	
Redhead		rare																								
Canvasback	tv, fall	rare						tv	c	Mar. 30		Oct.		c	tv	c	Mar. 29			tv				tv	c	
American scaup duck	tv	unc						wv	oc						tv	fc					once				rare	
Lesser scaup duck	tv							tv	c					fc	tv	ab	Mar. 22			tv	c				rare	
Ring-necked duck														unc	tv	fc	Mar. 29			tv	c				fc	
American golden-eye	sr							tv	unc																	
Barrow golden-eye				yes				wv			May 20			c	tv, wv	ab, unc	Mar. 29		once, yes	tv	c				c	
Bufflehead		unc																								
Old squaw	tv							tv, wv	c, oc	Apr.		Oct.		c						tv	c			tv	c	
Harlequin duck								wv	c					fc	tv	ab	Mar. 25			tv	rare		27 Oct. '81		ab	
Labrador duck															tv	ab	Apr. 9									
American eider																										
King eider									oc																	
American scoter	tv, fall								oc																	
White-winged scoter	tv, fall	c						tv	in fall			Sept. 12		fc	wv	ac		30 Jan. '77		tv	rare			tv	unc	
Surf scoter	tv, fall	fc						tv	c						tv	c					oc			tv	c	
Ruddy duck								tv	fc, in fall						tv	rare					c					
Lesser snow goose								tv	c												once, '84					
Greater snow goose		once	10 Nov. '81											fc	tv	ab				tv	fc					
Blue goose																										
Ant white-fronted goose																										
Canada goose	tv																									
Hutchins goose																										
White-bellied brant								tv	c	Mar. 15	May 1			fc	tv	c	Apr. 8			tv	c			tv	c	
Black brant																										
Barnacle goose																					once		30 Oct. '91			
Whistling swan	sr																									
Trumpeter swan														rare							oc	13 Mar. '90		tv	unc	30 Mar. '89
White ibis																										
Glossy ibis								tv	oc																	
White-faced glossy ibis																										

SPECIES RECORDED	BERGTOLD, BUFFALO AND VICINITY		GREGG, CHEMUNG COUNTY, 1891		CHAPMAN, NEW YORK AND VICINITY, 1894						
	Resident or transient	Common or rare	Resident or transient	Common or rare	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Bre
Holboell grebe	av	once	tv	c	wr, tv	unc					
Horned grebe			tv, wr	cc	wr, tv	fc, c					
Pied-billed grebe	tv	oc	tv	c	tv, wr	c, rare					yes
Loon	wv	fc		c, spring	wr, tv	unc, c					
Black-throated loon					av	once		29 Apr. '93			
Red-throated loon	wv	rare			wr, tv	fc, c					
Puffin					wv	rare			15 Dec. '82		
Black guillemot					wv	once					
Brunnich murre					wv	irreg, c					
Razor-billed auk					wr	reg					
Dovekie					wv	oc					
Skua	av	once									
Pomarine jæger					tv	fc, irreg			July	Oct	
Parasitic jæger					tv	reg					
Long-tailed jæger					tv	oc					
Ivory gull											
Kittiwake	tv	fc			wr, tv	rare, c					
Glaucous gull	wv	rare			wr	rare					
Iceland gull					wv	once		3 Mar. '94			
Kumlien gull					wv	twice		8 Mar. '98	16 Feb. '94		
Great black-backed gull					wr	fc, reg					
Herring gull	tv	c	wv		wr	c		Apr	Sept		
Ring-billed gull					wr, tv	unc, fc					
Laughing gull	av				sr	c formerly					June 8
Bonaparte gull	tv	rare			tv, wv	reg, oc					
Little gull					av	once		10 May '02	15 Sept. '87		
Sabine gull					av	once		July '37			
Gull-billed tern					sv	unc	8 July '84				
Caspian tern					tv	unc		May 12			
Royal tern					sv	once	27 Aug. '31				
Cabot tern											
Trudeau tern											
Forster tern					sv	rare					
Common tern	tv	c, breeds			sr, tv	c					May 8
Arctic tern	av										
Roseate tern					sr, tv	unc					
Least tern	tv	rare			tv, sr	rare formerly					
Sooty tern					sv	rare					
Black tern	tv	rare			tv	c, irreg					
Black skimmer					sv	oc					
Cory shearwater					tv	fc			Aug	Nov	
Greater shearwater					sv	unc	June			Nov	
Audubon shearwater					sv	rare					
Sooty shearwater					sv	oc					
Black-capped petrel											
Scaled petrel											
Leach petrel					tv	unc					
Wilson petrel					sv		May			Sept	
Yellow-billed tropic-bird											
Booby					av	once					
Gannet					tv						
Cormorant	tv	rare			wv	rare					
Double-crested cormorant					tv	c					
American white pelican					av		May 11				
Brown pelican					av						
Man-o'-war bird											
American merganser	tv	oc		c	wr	unc		Apr	Nov		
Red-breasted merganser	tv	oc		rare	tv	ab					
Hooded merganser	tv	rare		unc	tv, wv	unc, oc					
Mallard	tv	fc		c	tv	irreg					
Black duck	tv	rare	tv	c	tv, wv	c, fc					May 5
Gadwall				once	tv	very rare					
Widgeon					av						
Baldpate	tv	oc	tv	c	tv	irreg					
European teal					av	rare					
Green-winged teal	tv	fc		c	wr	rather unc					
Blue-winged teal	tv	c		c	tv	unc					
Cinnamon teal											
Shoveler	tv	oc	tv	oc, spring	tv	rare, irreg					
Pintail	tv	fc			tv	c					
Wood duck	tv	fc, breeds	sr	c	sr	rare, local					May 6
Rufous-crested duck					av	once					
Redhead	tv	c		c	tv, wv	reg, oc					
Canvasback	tv	oc		once	tv	unc					
American scaup duck	tv	oc		occurs	tv	c			Oct		
Lesser scaup duck			tv		tv	c					
Ring-necked duck	tv	fc	res		tv	very rare					
American golden-eye	tv	c		c	wr, tv	fc					
Barrow golden-eye											
Buffle-head	tv	c		c	wr, tv	fc					
Old squaw	tv	ab		once	wr	c					
Harlequin duck	av				wv	very rare					
Labrador duck					wv	extinct					
American eider	wv	rare			wv	rare					
King eider	av				wv	reg					
American scoter	tv	c			wr	c					
White-winged scoter	tv	c			wv, tv	c					
Surf scoter	av				wv, tv	c					
Ruddy duck	tv	fc			tv	fc					
Lesser snow goose											
Greater snow goose	wv	oc			tv	irreg					
Blue goose					tv	rare, once					
Am. white-fronted goose					tv	rare					
Canada goose	wv	oc	tv	c	tv	c					
Hutchins goose					tv	rare					
White-bellied brant	av				tv	c	Apr	May	Oct		
Black brant					tv	oc					
Barnacle goose					av	once			Oct. '76		
Whistling swan	av				tv	rare					
Trumpeter swan	av										
White ibis					av	twice					
Glossy ibis					tv	twice					
White-faced glossy ibis											

ORT, WESTERN NEW YORK, 1896			FISHER, SING SING, 1898						EATON, WESTERN NEW YORK, 1901			
dent r sient	Common or rare	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Resident or transient	Common or rare	Arrives from south	Leaves for north
	rare		tv	rare		Dec.	Oct.		wv	unc.		May 4
			tv	c.		Dec.	Oct.		tv, wv	c in spring, oc.	Apr. 1	May 15
		yes	tv, sr	c, oc	Apr. 6	Apr. 20	Sept. 3	Oct. 28	sr, tv	unc, c.	Apr. 4	
	c.		tv	c.	Mar.			Oct.	tv, wv	c, oc.	Apr. 1	May 30
	oc.		tv	oc.					wv	unc.		May
			av.						wv	oc.		Mar., May '96
			av.									
									av.	once, spring, '86		
			av.						tv	very rare		
									tv	very rare		
									wv	rare		
									wv	rare		
									wv	rare		
	rare											
	oc.		tv, wv	cc.		May 9	Sept. 21		wv, tv	c, ab.		18 Apr. '98
	oc.		tv	oc.					tv	oc.		
									av.	once		
	rare.		tv	rare.	Apr.			Oct.	tv	fc.	Apr. 10	June 10
									tv	unc.	Apr. 28	
	oc.		tv	oc.					tv, sv	fc, oc.	May	June
	rare, 31 May '86								av.	once		
									sv	ac, twice		
									tv	oc.		
									av.	once, 20 Sept. '76		
	rare.		av.				Sept.		tv, sv	fc.	Apr. 28	
									av.	once		
									av.	once, 28 Aug. '93		
									av.	once, Apr. '80		
	very rare, Oct. '75								av.	once, Oct. '75		
	once, Sept. '78								av.	once, Sept. '76		
			av.	once, June					tv	rare		
									tv	unc.		
									tv	very rare, once		
	c.		tv	fc.		Mar. 8	Jan. 1		wv, sr	c, oc		Apr. 20
	fc.		tv	c.		Apr. 30	Dec.		wv, tv	fc, c.		Apr. 30
	c.		tv	rare.	Mar.				tv, sr, wv	fc, oc, rare	Mar. 20	May 1
	fc.		tv	rare.		Mar.	Oct.		tv, sr, wv	fc, oc, oc	Mar. 15	Apr. 30
	c.	yes	sr	fc.	Mar. 6			Nov. 13	tv, wv, sr	c, fc, oc		
									tv	fc.	Mar. 20	Apr. 30
									av.	once		
	unc.		tv	c.	Mar. 11	Apr. 12	Oct. 4	Oct. 28	tv	fc.	Mar. 20	Apr. 25
	unc.		tv	c.	Apr.		Sept. 11	Oct. 28	tv, wv	fc, rare.	Apr.	
	unc.		tv	c, fall			Sept. 24	Oct. 17	tv, sr	fc, rare.	Apr.	
									av.	once, 18 Apr. '86		
	oc.		av.					Oct.	tv	unc.	Apr.	
	c.		tv	c.	Mar. 15	Apr. 10	Sept. 26	Dec. 4	tv	c in spring.	Mar. 15	Apr. 15
		yes	sr	fc.					sr	fc.	Mar. 30	
	c.		tv	c.	Apr. 1	Apr. 24	Oct. 12	Oct. 28	tv, wv	c, oc.	Mar. 20	Apr. 30
	rare.		tv	rare.				Oct.	tv, wv	oc.		Mar. 20
			tv	c.	Mar. 22	Apr. 13	Oct. 4	Dec. 3	tv, wv	c, fc.		Apr. 25
		yes (?)	tv	c.	Jan. 28	Apr. 12	Aug. 31	Nov.	tv, wv, res.	c, oc, rare.	Mar. 20	May 20
	c.		av.		Apr.				tv	unc.		
	rare.		tv, wv	c.		May	Nov.		wv	c.		Apr. 25
			tv	fc.					tv, wv	c, oc.	Apr. 10	May 20
			wv	fc.		Apr. 6	Dec. 4		tv, wv	c.	Apr. 1	Apr. 25
									av.	once		
			av.	once			14 Dec. '94		wv	rare.		
									wv	oc.		
			tv	rare.				Oct.	tv, wv	fc.	May, rarely	
			tv	fc.					tv	c.	May	
			tv	c.			Oct. 7	Oct. 22	tv	c, fall		
	rare.		tv	c.	Mar. 14	Apr. 6	Oct. 5	Oct. 28	tv	fc.	Mar. 25	Apr. 20
			av.		Apr.				wv	rare.		
										once		
	c.		tv	fc.	Mar. 11	May 21		Oct.	tv, wv	c, oc.	Mar. 10	Apr. 25
	fc (?)								tv	once		
			av.						tv	rare, twice		
									tv	rare		
	rare.								tv	oc.	Apr.	
									av.	twice		
	rare.								sv	very rare, twice	Apr. '94, May '84	
									av.	once, Aug. '84		

SPECIES RECORDED	BERGTOLD, BUFFALO AND VICINITY		GREGG, CHEMUNG COUNTY, 1891		CHAPMAN, NEW YORK AND VICINITY, 1894							SHORT, WESTERN NEW YORK, 1896			FISHER, SING SING, 1898						EATON, WESTERN NEW YORK, 1901			
	Resident or transient	Common or rare	Resident or transient	Common or rare	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Resident or transient	Common or rare	Arrives from south	Leaves for north
Holboell grebe	av	once	tv	c	wr, tv	unc						tv	rare		tv	rare		Dec.	Oct.		wv	unc		May 4
Horned grebe			tv, wr	cc	wr, tv	fc, c						tv			tv	c		Dec.	Oct.		tv, wv	c in spring, oc	Apr. 1	May 15
Pied-billed grebe	tv	oc	tv	c	tv, wr	c, rare					yes	sr		yes	tv, sr	c, oc	Apr. 6	Apr. 20	Sept. 3	Oct. 28	sr, tv	unc, c	Apr. 4	
Loon	wv	fc		c, spring	wr, tv	unc, c						tv	c		tv	c	Mar			Oct.	tv, wv	c, oc	Apr. 1	May 30
Black-throated loon					av	once		29 Apr. '93																
Red-throated loon	wv	rare			wr, tv	fc, c						tv	oc		tv	oc					wv	unc		May
Puffin					wv	rare			15 Dec. '82															
Black guillemot					wv	once																		
Brünnich murre					wv	irreg, c									av						wv	oc		Mar., May '96
Razor billed auk					wr	reg																		
Dovekie					wv	oc									av									
Skua	av	once																			av	once, spring, '86		
Pomarine jæger					tv	fc, irreg			July	Oct					av						tv	very rare		
Parasitic jæger					tv	reg															tv	very rare		
Long-tailed jæger					tv	oc																		
Ivory gull																								
Kittiwake	tv	fc			wr, tv	rare, c															wv	rare		
Glaucous gull	wv	rare			wr	rare															wv	rare		
Iceland gull					wv	once		3 Mar. '04													wv	rare		
Kumlien gull					wv	twice		8 Mar. '98	16 Feb. '94															
Great black-backed gull					wr	fc, reg						tv	rare								wv	oc		18 Apr. '98
Herring gull	tv	c	wv		wr	c		Apr.	Sept			tv	oc		tv, wv	cc		May 9	Sept. 21		wv, tv	c, ab		
Ring-billed gull					wr, tv	unc, fc						tv	oc		tv	oc					tv	oc		
Laughing gull	av				sr	c formerly					June 8										av	once		
Bonaparte gull	tv	rare			tv, wv	reg, oc						tv	rare		tv	rare	Apr.			Oct.	tv	fc	Apr. 10	June 10
Little gull					av	once		10 May '02	15 Sept. '87															
Sabine gull					av	once		July '37																
Gull-billed tern					sv	unc	8 July '84														tv	unc	Apr. 28	
Caspian tern					tv	unc		May 12																
Royal tern					sv	once	27 Aug. '31																	
Cabot tern																								
Trudeau tern																								
Forster tern					sv	rare															tv, sv	fc, oc	May	June
Common tern	tv	c, breeds			sr, tv	c					May 8	tv	oc		tv	oc					av	once		
Arctic tern	av																				sv	ac, twice		
Roseate tern					sr, tv	unc						tv	rare, 31 May '86								tv	oc		
Least tern	tv	rare			tv, sr	rare formerly															av	once, 20 Sept. '76		
Sooty tern					sv	rare															tv, sv	fc	Apr. 28	
Black tern	tv	rare			tv	c, irreg						tv	rare		av				Sept.		av	once		
Black skimmer					sv	oc																		
Cory shearwater					tv	fc			Aug	Nov														
Greater shearwater					sv	unc	June			Nov														
Audubon shearwater					sv	rare																		
Sooty shearwater					sv	oc															av	once, 28 Aug. '93		
Black-capped petrel																					av	once, Apr. '80		
Scaled petrel																								
Leach petrel					tv	unc															av	once, Oct. '75		
Wilson petrel					sv		May			Sept		av	very rare, Oct. '75								av	once, Sept. '76		
Yellow-billed tropic-bird												av	once, Sept. '78											
Booby																								
Gannet					av	once															tv	rare		
Cormorant	tv	rare			tv																tv	unc		
Double-crested cormorant					wv	rare															tv	very rare, once		
American white pelican					tv	c									av	once, June								
Brown pelican					av		May 11																	
Man-o'-war bird					av																			
American merganser	tv	oc										tv	c					Mar. 8	Jan. 1		wv, sr	c, oc		Apr. 30
Red-breasted merganser	tv	oc		c	wr	unc		Apr.	Nov			tv	fc		tv	fc		Apr. 30	Dec.		wv, tv	fc, c	Mar 20	May 1
Hooded merganser	tv	rare		rare	tv	ab						tv	c		tv	c					tv, sr, wv	fc, oc, rare	Mar. 15	Apr. 30
Mallard	tv	fc		unc	tv, wv	unc, oc						tv	c		tv	rare	Mar				tv, sr, wv	fc, oc, oc		
Black duck	tv	rare	tv	c	tv	irreg						tv	fc		tv	rare		Mar	Oct	Nov. 13	tv, wv, sr	c, fc, oc	Mar. 20	Apr. 10
Gadwall				c	tv, wv	c, fc					May 5	tv	c	yes	sr	fc	Mar. 6				tv	fc		
Widgeon				once	tv	very rare															av	once	Mar. 20	Apr. 25
Baldpate	tv	oc	tv		av																tv	fc		
European teal				c	tv	irreg						tv	unc		tv	c	Mar. 11	Apr. 12	Oct. 4	Oct. 28			Apr.	
Green-winged teal	tv	fc			av	rare															tv, wv	fc, rare	Apr.	
Blue-winged teal	tv	c		c	wr	rather unc						tv	unc		tv	c	Apr		Sept. 11	Oct. 28	tv, sr	fc, rare		
Cinnamon teal				c	tv	unc						tv	unc		tv	c, fall			Sept. 24	Oct. 17	av	once, 18 Apr. '86	Apr.	
Shoveler	tv	oc																		Oct.	tv	unc	Mar. 15	Apr. 15
Pintail	tv	fc	tv	oc, spring	tv	rare, irreg						tv	oc		av				Sept. 26	Dec. 4	tv	c in spring	Mar. 30	
Wood duck	tv	fc, breeds	sr	c	tv	c						tv	c		tv	c	Mar. 15	Apr. 10			sr	fc		
Rufous-crested duck				c	sr	rare, local					May 6	tv		yes	sr	fc							Mar. 20	Apr. 30
Redhead	tv	c			av	once															tv, wv	c, oc		Mar. 20
Canvasback	tv	oc		c	tv, wv	reg, oc						tv	c		tv	c	Apr. 1	Apr. 24	Oct. 12	Oct 28	tv, wv	oc		Apr. 25
American scaup duck	tv	oc		once	tv	unc						tv	rare		tv	rare				Oct.	tv, wv	c, fc	Mar. 20	May 20
Lesser scaup duck			tv	occurs	tv	c			Oct.			tv			tv	c	Mar. 22	Apr. 11	Oct. 4	Dec. 3	tv, wv, res	c, oc, rare		
Ring-necked duck	tv	fc	res		tv	c						tv	c	yes (?)	tv	c	Jan. 28	Apr. 12	Aug. 31	Nov	tv	unc		Apr. 25
American golden-eye	tv	c			tv	very rare						tv	c		av		Apr				wv	c		
Barrow golden-eye		c		c	wr, tv	fc						tv	rare		tv, wv	c		May	Nov				Apr. 10	May 20
Buffle-head	tv	c																			tv, wv	c, oc	Apr. 1	Apr. 25
Old squaw	tv	ab		c	wr, tv	fc						tv			tv	fc					tv, wv	c		
Harlequin duck	av			once	wr	c						tv			wv	fc		Apr. 6	Dec. 4		av	once		
Labrador duck					wv																			
American eider	wv	rare			wv	very rare													14 Dec. '94		wv	rare		
King eider	av				wv	extinct															wv		May, rarely	
American scoter	tv	c			wv	rare									av	once				Oct.	tv, wv	fc	May	
White-winged scoter	tv	c			wr	reg															tv	c		
Surf scoter	av				wv, tv	c									tv	rare				Oct 12	tv	c, fall	Mar. 25	Apr. 20
Ruddy duck	tv	fc			wv, tv	c									tv	fc			Oct 7	Oct 28	tv	fc		
Lesser snow goose					tv	fc						tv	rare		tv	c	Mar. 14	Apr. 6	Oct 5					
Greater snow goose	wv	oc													tv	c					wv	rare		
Blue goose					tv	irreg									av		Apr							
Am. white-fronted goose					tv	rare, once																once	Mar. 10	Apr. 25
Canada goose	wv	c	tv	c	tv	rare						tv	c							Oct.	tv, wv	c, oc		
Hutchins goose					tv	c						tv	fc (?)		tv	fc	Mar. 11	May 21			tv	once		
White-bellied brant	av				tv	rare															tv	rare, twice		
Black brant					tv	c	Apr.	May	Oct.						av						tv	rare		
Barnacle goose					tv	oc															tv	oc	Apr.	
Whistling swan	av				av	once			Oct. '76			tv	rare								av	twice		
Trumpeter swan	av				tv	rare																	Apr. '94, May '84	
White ibis																					sv	very rare, twice		
Glossy ibis					av	twice						av	rare								av	once, Aug. '84		
White-faced glossy ibis					tv	twice																		

SPECIES RECORDED	EATON, WESTERN NEW YORK, 1901 (*cont'd*)			EMBODY, MADISON COUNTY, 1901						
	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Returns from north	Departs for south	Resident or transient	Common or rare
Holboell grebe	Oct. 20			tv	rare, once		25 Oct. '00		wv, tv	irreg
Horned grebe	Oct. 1	Nov. 20		tv	rare, once	3 Apr. '98			tv, wv	ab, rare
Pied-billed grebe		Nov. 18	yes	tv, wv	ab, c				tv, sr	unc, rare
Loon	Sept. 15	Dec. 10		tv, wv	unc				tv, wv	ab, c
Black-throated loon									av	29 Apr. '93
Red-throated loon	Nov			wv	rare, once	18 Feb. '99			tv, wv	c, rare
Puffin									wv	rare
Black guillemot									av	once
Brünnich murre	Nov. 27, Dec. 15			wv	oc		26 Nov. '00		wv	irreg
Razor-billed auk									wv	irreg
Dovekie									wv	irreg
Skua									av	twice
Pomarine jæger									tv	reg
Parasitic jæger									tv	reg
Long-tailed jæger									tv	rare
Ivory gull									av	5 Jan. '93
Kittiwake	9 Nov. '90								tv, wv	c, unc
Glaucous gull	29 Jan. '95								wv	irreg
Iceland gull	1 Feb. '84			wv	rare, once		1 Feb. '84		wv	rare
Kümlien gull									wv	rare
Great black-backed gull	1 Feb. '86								wv	c
Herring gull				wv	fc	Apr. 1	Dec. 1		wv, res	ab, unc
Ring-billed gull	Oct. 20								wv	c
Laughing gull									sr, tv	rare, irreg
Bonaparte gull	Sept. 1	Nov. 20		tv	c				tv, wv	c, unc
Little gull									av	twice
Sabine gull									av	twice
Gull-billed tern									av	
Caspian tern	Sept. 20								tv	unc
Royal tern									av	
Cabot tern										
Trudeau tern									av	once
Forster tern									tv	rare
Common tern	Aug	Oct. 10	near Buffalo						sr	c
Arctic tern									tv	rare
Roseate tern									sr	unc
Least tern									sv	rare
Sooty tern									av	once
Black tern		Sept. 20							tv	irreg
Black skimmer									sv	oc
Cory shearwater									sv	unc
Greater shearwater									sv	unc
Audubon shearwater									av	
Sooty shearwater									sv	unc
Black-capped petrel				tv	rare	28 Aug. '93			av	
Scaled petrel										
Leach petrel									tv	unc
Wilson petrel									sv	c
Yellow-billed tropic-bird										
Booby									av	once
Gannet									tv, wv	fc, unc
Cormorant									tv	fc
Double-crested cormorant	Aug. 14	Nov. 30							tv	c
American white pelican	5 Oct. '94								av	twice
Brown pelican									av	
Man-o'-war bird									av	twice
American merganser	Oct. 20			tv, wv	c, unc				wv	unc
Red-breasted merganser	Oct. 10			wr	c	Apr. 1	Nov. 20		tv, wv	ab, unc
Hooded merganser	Oct. 15	Nov. 25		wv	rare				tv, res	unc, rare
Mallard	Oct. 1	Nov. 20	yes	tv	fc, fall				tv, wv	unc, rare
Black duck			yes	tv	c, fall				wv, res	ab, unc
Gadwall	Sept. 20	Nov. 1							av	
Widgeon									av	
Baldpate	Sept. 20	Nov. 10							tv	fc
European teal									av	3 times
Green-winged teal	Sept	Oct	once	tv	c, fall		Sept. 1	Oct. 20	tv, wv	unc
Blue-winged teal	Sept	Oct		tv	c		Sept. 1	Oct. 20	tv	c
Cinnamon teal										
Shoveler	Oct	Nov							tv	rare
Pintail	Sept. 25	Nov. 15		tv	unc		Sept. 20		tv, wv	ab, unc
Wood duck		Nov. 15	yes	formerly, sr	c				tv, res	unc, rare
Rufous-crested duck									av	once, '72
Redhead	Sept. 25	Nov. 25		tv	fc				tv, wv	ab, irreg., unc
Canvasback	Nov. 15			tv					tv	rare
American scaup duck	Oct. 1			tv	c				tv, wv	ab, fc
Lesser scaup duck	Oct. 1	Nov. 20		tv, wv	fc, oc		Nov		tv, wv	c, oc
Ring-necked duck									av	3 times
American golden-eye	Nov. 1			tv, wv	c, oc				tv, wv	c
Barrow golden-eye									av	once
Buffle-head	Oct. 10	Nov. 25		tv	fc, fall				tv, wv	c, fc
Old squaw	Oct. 15	Nov. 20							wv	ab
Harlequin duck									wv	rare
Labrador duck										rfc, formerly
American eider									wv	rare
King eider									wv	reg., c at times
American scoter		Oct., com		tv	rare, once				wv	c
White-winged scoter	Oct								wv	ab
Surf scoter	Oct. 1	Nov. 10							wv	c
Ruddy duck	Sept. 25	Oct. 30		tv	fc				tv	irreg., c at times
Lesser snow goose									wv	twice
Greater snow goose									tv	irreg
Blue goose									av	
Am. white-fronted goose									av	5 times
Canada goose	Oct. 1	Nov. 30		tv	c				tv, wv	c, unc
Hutchins goose									av	
White-bellied brant	26 Nov. '78								tv, wv	c, unc
Black brant	30 Oct. '91			tv	rare, once		30 Oct. '91		av	twice
Barnacle goose									av	once
Whistling swan									av	rare
Trumpeter swan										
White ibis									av	once
Glossy ibis									av	twice
White-faced glossy ibis										

r Last record 1874

LONG ISLAND, DUTCHER, ET AL.					HOFFMAN, EASTERN N. Y., 1904		BRAISLIN, LONG ISLAND, 1907		
Arrives from south	Leaves for north	Return from north	Departs for south	Breeds	Resident or transient	Common or rare	Resident or transient	Common or rare	Arrives from south
	Apr. 10, 21	Oct. 22, Nov. 20			tv		wv		
	Apr. 13, May 1, 30	Sept., Oct., Nov. 3			tv	c	wv	c	
	April, May 1	Sept	Dec. 15	rarely	tv, sr	c, local	res, tv	rare, fc	
	May 20, 30, June 20	Sept. 7, Oct. 12, 30			sr, wv	c	wv	c	
							av		
	May 8, 11, June 30	Sept. 19, Oct. 11, 25			tv	oc	tv	c	Mar. 30
	Mar. 30, '02	15 Dec. '82					wv	rare	
							av	once	
					wv	irreg	wv	c	
	Jan. 26, Feb. 2, 6	Nov. 25, Dec. 2, 10			wv	irreg	wv	reg	
	Jan. 10, 15, Feb. 6	Sept. 8, Nov. 23, 28					wv	unc	
	10 Jan. '86	10 Aug. '96					av	once	
	July 7	Aug. 2, 8, 11	Oct. 18, 30		tv		tv	reg	
		July 29, Aug. 16, 25	Oct. 9, 30, Nov. 15		tv		tv	fc	Apr. 30
					tv	rare	tv	casual	
							av	once	
	Mar. 21	Nov. 13			tv, wv	c, unc	wv	c	
	Feb. 8, Mar. 19						wv	rare	
	3 Mar. '94						wv	very rare	
	8 Mar. '98						wv	once	
	Mar. 17, Apr.	Aug. 8, Sept. 22, Oct. 30			wv		wv	c	
	May 30	July 23, Sept			wv, tv	ab, c	res, wv	ab	
	Mar., Apr. 10	Aug. 27, Sept. 11, 22			wv	c	tv, wv	reg, rare	Mar. 25
			Sept		sr	unc	sr	rare	June 15
	Apr. 24, May 4	Oct., Nov. 12			tv	c, rare	wv	reg	
	10 May '02	15 Sept. '87					av	twice	
	July '37	6 Oct. '99						casual	
4, 8								rare	July 4, 8
		Aug	Sept				tv	reg	May 11
'31								once	27 Aug. '31
							av		
		Sept. 3, 7	Sept. 17, Oct. 1					casual	
15			Sept. 5, 11	July 1	sr, tv	c, local	sr	c, local	May 20
'84							tv	rare	
			Sept		sr	rare	sr	unc	
					sr	unc, local	tv	rare	
			13 Sept. '78				av	once	13 Sept. '78
		Aug	Sept		tv	irreg	tv	c, fall	
July 26			Aug. 2, Sept. 3				sv	rare	My 20, Ag 2
16			Oct. 18, 20, Nov. 29		sv		sv	reg	Aug. 6
4					sv		sv	oc	June
'87							av	once	1 Aug. '97
, 23					sv			rare	July '50
							av	once	1850
30	June 15		July 27				tv	rare	4 May '88
			Sept		sv	c, off coast	sv	c	July 20
							av	once	
		Oct	Nov		tv	unc	tv	fc	Mar. 23
							tv	rare	
	May	Aug	Nov		tv	fc	tv	c, fall	Apr. 20
'85							av	twice	11 May '85
							av	once	1844
'86							av	twice	4 Aug. '86
	Mar	Nov. 2, 17			wv	fc	wv	fc	
17	May 15, June 13	Sept. 15, Oct. 27, Nov. 4	Dec. 1, 12		tv, wv	ab, c	tv	ab	Mar. 25
	May	Nov. 19			tv	unc	tv, res	c, rare	
	Apr	Sept. 14, Oct. 17	Nov. 9, 25		tv	unc	tv	unc	Mar
	Apr. 30, May 12	Aug. 11, Sept. 14, 30		yes	tv, wv, res	ab, ab, unc	res, tv	c, ab	
'79		24 Nov. '86					tv	rare	
								casual, 6 sp	
, Mar. 20	Apr. 9, 14	Sept. 11, Oct. 3, 17	Nov. 16, Dec. 13		tv	c, local	tv, wv	c, oc	Mar. 8
								casual	
	Apr	Sept. 5, 26, Oct. 4	Oct. 26, Nov. 25, Dec. 17		tv, wv	unc, oc	tv	unc	Mar. 8
		Sept. 1, 14	Nov. 1, 12, Dec. 12		tv	fc	tv	unc	Mar. 24
							tv	rare	
, 24, Mar. 6	Mar. 24, Apr. 15, 16	Aug. 25, Sept. 15, 26	Nov. 19, 30, Dec. 1		tv	c	tv, wv	fc, rare	Mar. 3
, 29		Oct. 16	Oct. 29, Nov. 24, Dec. 15	yes	tv, sr, wv	fc, rare, unc	sr	rare	May 2
							av		
, 26, Mar. 19	Apr. 15	Oct. 1, 6, Nov	Dec		tv	c, local	tv	c, local	Feb. 15
, Mar. 20	Apr. 6	Oct. 12, 17	Dec. 5, 11				tv	rare	
	Apr. 16, May 1	Sept. 17, Oct. 11, 20			wv, tv	ab, c	tv, wv	ab, c	
		Oct	Nov. 18, Dec. 20		tv	c	tv, wv	c, unc	
								casual	
	Apr. 6, 15, 19	Nov. 3, 15			wv	c	wv	c	
							av	once	
	Apr. 20	Sept. 16, Oct. 1, 19	Nov. 23, Dec. 15		tv	fc	wv	fc	
	Apr. 15, 23, May 27	Nov. 1, 20			wv	c	wv	ab	
	Jan	Nov. 10, 22					wv	very rare	
							wv	formerly	
	25 Mar. '94	Nov. 8, Dec. 16					wv	rare	
	Apr. 8, 27	Nov. 1, 16, Dec. 8					wv	reg	
	Apr. 20, 30	Sept. 29, Oct. 17			wv	fc	wv	c	
	Apr. 29, May 15	Aug. 21, Sept. 15, Oct. 2			wv	ab	wv	c	
	Apr. 23, 30, June 16	Oct			wv		wv	c	
		Sept. 21, Oct. 5	Dec. 5, 15		tv		wv, tv	unc, c, fall	
		8 Oct. '81, 29 Oct. '88							
	Apr	Sept. 28, Oct. 9, 29	Nov. 15, Dec				tv	rare	
'87	28 Apr. '83		22 Nov. '93					casual, once	
18	Apr. 5	Oct. 18	Nov. 26, 28					casual	
, 24, 31	Apr. 21, May 7	Sept. 8, Oct. 11, 19	Nov. 27, Dec. 21		tv		tv, wv	c, unc	Feb. 27
								oc	
, 27, Mar. 19	Apr. 28, May 15, 27	Oct. 14, Nov. 17	Nov. 30, Dec		tv		tv	c	Mar. 6
							tv	oc	
		20 Oct. '76						once	
		Nov. 5, 26	Dec. 24				tv	rare	
								casual, twice	
'47			10 Oct. '48					casual, twice	

SPECIES RECORDED	EATON, WESTERN NEW YORK, 1901 (*cont'd*)			EMBODY, MADISON COUNTY, 1901					LONG ISLAND, DUTCHER, ET AL.							HOFFMAN, EASTERN N. Y., 1904		BRAISLIN, LONG ISLAND, 1907		
	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Returns from north	Departs for south	Resident or transient	Common or rare	Arrives from south	Leaves for north	Return from north	Departs for south	Breeds	Resident or transient	Common or rare	Resident or transient	Common or rare	Arrives from south
Holboell grebe	Oct. 20			tv	rare, once		25 Oct. '00		wv, tv	irreg		Apr. 10, 21	Oct. 22, Nov. 20			tv		wv		
Horned grebe	Oct. 1	Nov. 20		tv	rare, once	3 Apr. '98			tv, wv	ab, rare		Apr. 13, May 1, 30	Sept., Oct., Nov. 3			tv	c	wv	c	
Pied-billed grebe		Nov. 18	yes	tv, wv	ab, c				tv, sr	unc, rare		April, May 1	Sept.	Dec. 15	rarely	tv, sr	c, local	res, tv	rare, fc	
Loon	Sept. 15	Dec. 10		tv, wv	unc				tv, wv	ab, c		May 20, 30, June 20	Sept. 7, Oct. 12, 30			sr, wv	c	wv	c	
Black-throated loon									av	29 Apr. '93								av		
Red-throated loon	Nov.			wv	rare, once	18 Feb. '99			tv, wv	c, rare		May 8, 11, June 30	Sept. 19, Oct. 11, 25			tv	oc	tv	c	Mar. 30
Puffin									wv	rare		Mar. 30, '02	15 Dec. '82					wv	rare	
Black guillemot									av	once								av	once	
Brunnich murre	Nov. 27, Dec. 15			wv	oc		26 Nov. '00		wv	irreg						wv	irreg	wv	c	
Razor-billed auk									wv	irreg		Jan. 26, Feb. 2, 6	Nov. 25, Dec. 2, 10			wv	irreg	wv	reg	
Dovekie									wv	irreg		Jan. 10, 15, Feb. 6	Sept. 8, Nov. 23, 28					wv	unc	
Skua									av	twice		10 Jan. '86	10 Aug. '96					av	once	
Pomarine jaeger									tv	reg	June 15	July 7	Aug. 2, 8, 11	Oct. 18, 30		tv		tv	reg	
Parasitic jaeger									tv	reg	June 15		July 29, Aug. 16, 25	Oct. 9, 30, Nov. 15		tv		tv	fc	Apr 30
Long-tailed jaeger									tv	rare						tv	rare	tv	casual	
Ivory gull									av	5 Jan. '93								av	once	
Kittiwake	9 Nov. '90								tv, wv	c, unc		Mar. 21	Nov. 13			tv, wv	c, unc	wv	c	
Glaucous gull	20 Jan '05								wv	irreg		Feb. 8, Mar. 19						wv	rare	
Iceland gull	1 Feb. '84			wv	rare, once		1 Feb. '84		wv	rare		3 Mar. '04						wv	very rare	
Kumlien gull									wv	rare		8 Mar. '98						wv	once	
Great black-backed gull	1 Feb. '86								wv	c		Mar. 17, Apr.	Aug. 8, Sept. 22, Oct. 30			wv		wv	c	
Herring gull				wv	fc	Apr. 1	Dec. 1		wv, res	ab, unc		May 30	July 23, Sept.			wv, tv	ab, c	res, wv	ab	
Ring-billed gull	Oct. 20								wv	c		Mar., Apr. 10	Aug. 27, Sept. 11, 22			wv	c	tv, wv	reg, rare	Mar. 25
Laughing gull									sr, tv	rare, irreg	Apr.			Sept.		sr	unc	sr	rare	June 15
Bonaparte gull	Sept. 1	Nov. 20		tv	c				tv, wv	c, unc		Apr. 24, May 4	Oct., Nov. 12			tv	c, rare	wv	reg	
Little gull									av	twice		10 May '02	15 Sept. '87					av	twice	
Sabine gull									av	twice		July '37	6 Oct. '99						casual	
Gull-billed tern									av		July 1, 4, 8								rare	July 4, 8
Caspian tern	Sept. 20								tv	unc			Aug.	Sept.				tv	reg	May 11
Royal tern									av		27 Aug. '31								once	27 Aug. '31
Cabot tern																				
Trudeau tern																				
Forster tern									av	once								av		
Common tern	Aug.	Oct. 10	near Buffalo						tv	rare			Sept. 3, 7	Sept. 17, Oct. 1					casual	
Arctic tern									sr	c	May 9, 15			Sept. 5, 11	July 1	sr, tv	c, local	sr	c, local	May 20
Roseate tern									tv	rare	18 July '84							tv	rare	
Least tern									sr	unc	May			Sept.		sr	rare	sr	unc	
Sooty tern									sv	rare						sr	unc, local	tv	rare	
Black tern		Sept. 20							av	once				13 Sept. '78				av	once	13 Sept. '78
Black skimmer									tv	irreg			Aug.	Sept.		tv	irreg	tv	c, fall	
Cory shearwater									sv	oc	May 6, July 26			Aug. 2, Sept. 3				sv	rare	May 20, Aug 2
Greater shearwater									sv	unc	Aug. 6, 16			Oct. 18, 20, Nov. 29		sv		sv	reg	Aug. 6
Audubon shearwater									sv	unc	Aug. '84					sv		sv	c	June
Sooty shearwater									av		1 Aug. '87							av	once	1 Aug. '97
Black-capped petrel									sv	unc	June 19, 23					sv			rare	July '50
Sealed petrel				tv	rare	28 Aug. '93			av									av	once	1850
Leach petrel																				
Wilson petrel									tv	unc	May 4, 30	June 15		July 27				tv	rare	4 May '88
Yellow-billed tropic-bird									sv	c	May			Sept.		sv	c, off coast	sv	c	July 20
Booby																				
Gannet									av	once								av	once	
Cormorant									tv, wv	fc, unc	May		Oct.	Nov.		tv	unc	tv	fc	Mar. 23
Double-crested cormorant	Aug. 14	Nov. 30							tv	fc								tv	rare	
American white pelican	5 Oct. '94								tv	c	Apr.	May	Aug.	Nov.		tv	fc	tv	c, fall	Apr 20
Brown pelican									av	twice	11 May '85							av	twice	11 May '85
Man-o'-war bird									av									av	once	1844
American merganser	Oct. 20								av	twice	4 Aug. '86							av	twice	4 Aug. '86
Red-breasted merganser	Oct. 10			tv, wv	c, unc				wv	unc						wv	fc	wv	fc	
Hooded merganser	Oct. 15	Nov. 25		wr	c	Apr. 1	Nov. 20		tv, wv	ab, unc	Mar. 1, 17	Mar.	Nov. 2, 17			tv, wv	ab, c	tv	ab	Mar. 25
Mallard	Oct. 1	Nov. 20	yes	wv	rare				tv, res	unc, rare		May 15, June 13	Sept. 15, Oct. 27, Nov. 4	Dec. 1, 12		tv	unc	tv, res	c, rare	
Black duck			yes	tv	fc, fall				tv, wv	unc, rare		May	Nov. 19			tv	unc	tv	unc	Mar.
Gadwall	Sept. 20	Nov. 1		tv	c, fall				wv, res	ab, unc		Apr.	Sept. 14, Oct. 17	Nov. 9, 25	yes	tv, wv, res	ab, ab, unc	res, tv	res, ab	
Widgeon									av		9 Apr. '79	Apr. 30, May 12	Aug. 11, Sept. 14, 30					tv	rare	
Baldpate	Sept. 20	Nov. 10							av				24 Nov. '86						casual, 6 sp.	
European teal									av							tv	c, local	tv, wv	c, oc	Mar. 8
Green-winged teal	Sept.	Oct.	once	tv					tv	fc	Feb. 26, Mar. 20	Apr. 9, 14	Sept. 11, Oct. 3, 17	Nov. 16, Dec. 13					casual	
Blue-winged teal	Sept.	Oct.		tv	c, fall		Sept. 1	Oct. 20	av	3 times						tv, wv	unc, oc	tv	unc	Mar. 8
Cinnamon teal				tv	c		Sept. 1	Oct. 20	tv, wv	unc		Apr.	Sept. 5, 26, Oct. 4	Oct. 26, Nov. 25, Dec. 17		tv	fc	tv	unc	Mar. 24
Shoveler	Oct	Nov.							tv	c	May 5		Sept. 1, 14	Nov. 1, 12, Dec. 12						
Pintail	Sept. 25	Nov. 15																tv	rare	
Wood duck		Nov. 15	yes	tv	unc				tv	rare	Feb. 15, 24, Mar. 6	Mar. 24, Apr. 15, 16	Aug. 25, Sept. 15, 26	Nov. 19, 30, Dec. 1		tv	c	tv, wv	fc, rare	Mar 1
Rufous-crested duck				formerly, sr	c		Sept. 20		tv, wv	ab, unc	Mar. 23, 29		Oct. 16	Oct. 29, Nov. 24, Dec. 15	yes	tv, sr, wv	fc, rare, unc	r	rare	May 2
Redhead	Sept. 25	Nov. 25							tv, res	unc, rare								av		
Canvasback	Nov. 15			tv	fc				av	once, '72	Feb. 19, 26, Mar. 19	Apr. 15	Oct. 1, 6, Nov.	Dec.		tv	c, local	tv	c, local	Feb 15
American scaup duck	Oct 1			tv					tv, wv	ab, irreg., unc	Feb. 23, Mar. 20	Apr. 6	Oct. 12, 17	Dec. 5, 11				tv	rare	
Lesser scaup duck	Oct 1	Nov. 20		tv	c				tv	rare		Apr. 16, May 1	Sept. 17, Oct. 11, 20			wv, tv	ab, c	tv, wv	ab, c	
Ring-necked duck				tv, wv	fc, oc		Nov		tv, wv	ab, fc			Oct.	Nov. 18, Dec. 20		tv	c	tv, wv	c, unc	
American golden-eye	Nov. 1								tv, wv	c, oc									casual	
Barrow golden-eye				tv, wv	c, oc				av	3 times						wv	c	wv	c	
Buffle-head	Oct 11	Nov. 25							tv, wv	c		Apr. 6, 15, 19	Nov. 3, 15				c	av	once	
Old squaw	Oct. 15	Nov 20		tv	fc, fall				av	once	Mar.			Nov. 23, Dec. 15		tv	fc	wv	fc	
Harlequin duck									tv, wv	c, fc		Apr. 20	Sept. 16, Oct. 1, 19			wv		wv	ab	
Labrador duck									wv	ab		Apr. 15, 21, May 27	Nov 1, 20					wv	very rare	
American eider									wv	rare		Jan.	Nov. 10, 22					tv	formerly	
King eider										rfc, formerly								wv	rare	
American scoter									wv	rare		25 Mar. '94	Nov. 8, Dec 16					wv	reg	
White-winged scoter	Oct	Oct. com		tv	rare, once				wv	reg., c at times		Apr. 8, 27	Nov. 1, 16, Dec. 8			wv	fc	wv	c	
Surf scoter	Oct 1	Nov. 10							wv	c		Apr. 20, 30	Sept. 20, Oct. 27			wv	ab	wv	c	
Ruddy duck	Sept 25	Oct. 30							wv	ab		Apr. 20, May 15	Aug. 21, Sept. 15, Oct. 2			tv		wv, tv	unc, c, fall	
Lesser snow goose									wv	c		Apr. 23, 30, June 16	Oct.	Dec. 5, 15						
Greater snow goose				tv	fc				tv	irreg, c at times			Sept 21, Oct 5					tv	rare	
Blue goose									wv	twice			8 Oct. '81, 29 Oct. '88						casual, once	
Am. white-fronted goose									tv	irreg	Apr. 3	Apr.	Sept 28, Oct. 9, 20	Nov. 15, Dec.					casual	
Canada goose	Oct. 1								av		21 Mar. '87			22 Nov. '93				tv, wv	c, unc	Feb. 27
Hutchins goose		Nov. 30							av	5 times	Mar. 2, 18	28 Apr. '83	Oct 18	Nov. 20, 28		tv				
White-bellied brant	26 Nov. '78			tv	c				av	c, unc	Mar. 13, 24, 31	Apr. 5	Sept 8, Oct. 11, 19	Nov. 27, Dec. 21				tv	c	Mar. 6
Black brant	10 Oct. '91								tv, wv	c		Apr. 21, May 7				tv		tv	c	
Barnacle goose									av	c, unc	Feb. 15, 27, Mar. 19	Apr. 28, May 15, 27	Oct. 14, Nov. 17	Nov. 30, Dec.					once	
Whistling swan				tv	rare, once		10 Oct. '91		tv, wv	twice								tv	rare	
Trumpeter swan									av	once			20 Oct. '76	Dec. 24					casual, twice	
White ibis									av	rare			Nov. 5, 16						casual, twice	
Glossy ibis																				
White-faced glossy ibis									av	once	12 Sept. '47			10 Oct. '48						
									av	twice										

r Last record 1874

SPECIES RECORDED	BRAISLIN, LONG ISLAND, 1907 (*continued*)				ALBANY					
	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south
Holboell grebe	Apr. 7	Nov. 11			wv	rare				
Horned grebe	May 15	Oct. 15			tv	unc				
Pied-billed grebe	Apr.	Aug. 15			tv, sr	fc, rare				
Loon	May 31	Aug. 10			tv	rare				
Black-throated loon	29 Apr. '93									
Red-throated loon	May 11	Sept. 14	Dec. 30			once, '04				
Puffin	Mar. 30	Dec. 15								
Black guillemot										
Brünnich murre	Mar. 24	Nov. 22			wv	rare				
Razor-billed auk	Feb. 6	Nov. 2								
Dovekie	Mar. 1, 24	Nov. 18								
Skua										
Pomarine jæger		July	late Oct							
Parasitic jæger		Aug. 6	Nov. 9							
Long-tailed jæger										
Ivory gull		5 Jan. '93								
Kittiwake	Feb. 27	Nov. 4								
Glaucous gull	May 1	Jan. 2								
Iceland gull	6 Feb. '98				wv				21 Nov. '88	
Kümlien gull	8 Mar. '98				wv				22 Jan. '84	
Great black-backed gull	Mar. 13	Nov. 3								
Herring gull	Apr.	Oct.			tv	fc				
Ring-billed gull	May 15	Sept. 5	Nov. 12							
Laughing gull			Sept. 2							
Bonaparte gull	May 11	Nov. 18								
Little gull	10 May '92	15 Sept. '97								
Sabine gull	July '37	6 Oct. '99								
Gull-billed tern										
Caspian tern		Sept. 3	Sept. 13							
Royal tern										
Cabot tern										
Trudeau tern										
Forster tern										
Common tern			Oct. 15	yes	tv	rare				
Arctic tern		1 July '84								
Roseate tern				June 19						
Least tern										
Sooty tern										
Black tern		July 21	Sept. 14		tv	once			12 Aug. '05	
Black skimmer			Oct. 12							
Cory shearwater			Oct. 18							
Greater shearwater			Nov							
Audubon shearwater										
Sooty shearwater			15 Aug. '07							
Black-capped petrel										
Scaled petrel					av				29 Sept. '90	
Leach petrel										
Wilson petrel			Aug. 17							
Yellow-billed tropic-bird										
Booby										
Gannet	May 9	Oct. 5	Dec. 5							
Cormorant		Sept. 24	Nov. 8							
Double-crested cormorant	May 15	Aug. 26	Nov. 5		tv	rare			21 Sept. '88	
American white pelican										
Brown pelican										
Man-o'-war bird										
American merganser		Nov. 4	Dec. 30		wv	fc		Mar.		Nov.
Red-breasted merganser	May 2	Oct. 15	Dec. 25		tv, wv	fc, oc		May 17		Nov. 18
Hooded merganser		Nov. 4	Dec. 14		tv	fc	Mar. 30	May 11		Nov. 12
Mallard	Apr.	Oct. 3	Dec. 24		tv	oc	Mar. 28	Apr. 22		
Black duck				Apr. 5	tv	unc			Oct. 18	Nov. 18
Gadwall										
Widgeon										
Baldpate	Apr. 16	Aug. 9, Oct. 10	Feb. 5		tv	oc	Apr. 5			Sept. 27
European teal		Dec. '00								
Green-winged teal		Oct. 2	Nov. 30		tv	unc	Apr. 8		Oct. 10, 27	Nov. 17
Blue-winged teal	Apr. 21	Aug. 28	Oct. 25		tv	fc	Apr. 16		Aug. 27	Sept. 29
Cinnamon teal										
Shoveler		Oct. 25	Nov. 29		tv	rare			Oct. 15	Nov. 7
Pintail	Mar. 6	Sept. 13	Oct. 25		tv	oc	Mar. 22		Sept. 22	Oct. 20
Wood duck			Nov. 27		tv	unc	Mar. 24		Sept. 29	Nov. 15, De
Rufous-crested duck										
Redhead	Mar. 22	Sept. 30	Jan. 9		tv	oc			Oct. 15	Nov. 12
Canvasback		Oct. 20	Feb. 11							
American scaup duck	Apr. 22	Sept. 1			tv	oc				
Lesser scaup duck	Apr. 28	Oct. 1			tv	unc	Apr. 10		Oct. 22	Nov. 10
Ring-necked duck		3 Nov. '98			tv	rare	Mar. 22			
American golden-eye	Apr.	Dec. 5			wv	fc		Apr. 7, 16	Nov. 15	
Barrow golden-eye					wv	rare			21 Jan. '87	
Buffle-head	Apr. 6	Dec. 8			tv	unc	Mar. 22	Apr. 28	Oct. 20	Nov. 15
Old squaw	May 1	Oct. 15			tv, wv	fc		May 23	Oct. 30, Nov. 1, 15	
Harlequin duck		6 Dec. '00								
Labrador duck										
American eider	25 Mar. '94									
King eider	Apr. 21	Nov. 13								
American scoter	Apr. 17	Sept. 17, Nov. 3			tv	oc			Sept. 24	Oct. 3
White-winged scoter	Apr. 13	Oct. 15			tv	oc		May 25		
Surf scoter	Apr. 13	Sept. 1, Oct. 17			tv	unc			Sept. 29, Oct. 10	Oct. 15, 28
Ruddy duck	May 22	Oct. 17			tv	oc			Oct. 24	Nov. 1
Lesser snow goose										
Greater snow goose		Oct. 8, Nov. 18	Nov. 24, Jan. 30							
Blue goose										
Am. white-fronted goose		18 Oct. '89								
Canada goose	Apr. 28	Oct. 1	Dec. 31		tv	unc				
Hutchins goose										
White-bellied brant	May 10	Nov. 18	Jan. 1							
Black brant										
Barnacle goose										
Whistling swan										
Trumpeter swan										
White ibis										
Glossy ibis										
White-faced glossy ibis										

ALLEGANY		BROOME		CATTARAUGUS			CAYUGA						
ent ent	Common or rare	Resident or transient	Common or rare	Resident or transient	Common or rare	Arrives from south	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds
							wv	rare			Oct. 25		
	rare			tv	fc		tv, wv	fc, oc	Apr. 3, 15		Sept. 8	Nov. 1	
	oc	tv	oc	tv	fc		sr	fc	Mar. 2, Apr. 22			Oct. 16	yes
	rare	tv	oc	tv	oc		tv, wv	fc, unc	Mar. 29, Apr. 15	May 29, June 17	Sept. 22	Nov. 1	
							wv	rare		18 Feb. '99			
							wv	rare		Apr	Dec. '00		
							av						
							wv	rare			4 Jan. '54		
							wv	unc					
		tv	oc, Mar.	tv	oc		wv, tv	fc, c		May 6, 24	Sept		
							tv	unc	Mar. 3				
	rare			tv	oc		tv	fc	Apr. 24				
							tv	rare	Oct. '87			Nov	
							tv	oc					
							av					20 Sept. '76	
				tv	oc		tv, sr	unc, rare					
							av	once	Sept. '93				
							av	once					
							tv	rare			29 Sept. '06		
							tv	rare	1864		1888		
		wv	c	wv	fc		wv, sr	c, local, rare		Mar. 25, Apr. 27			yes
				tv	oc		tv, wv	c, oc		May	Oct. 20		
	rare			tv	oc		tv, res	fc, oc	Mar. 30, Apr. 4	Apr. 20, May 5	Nov. 1, Oct. 29	Dec. 20	yes
	rare			tv	oc	Apr. 19	tv	fc	Mar. 15	Apr. 15	Oct. 1, 29	Dec. 15	
	rare	sr	rare	tv, res	fc, rare		tv, res	ab, unc	Mar. 15, Apr. 1	Apr. 30	Oct. 1	Dec. 20	yes
							tv	unc	Mar		Oct. 1	Nov. 1, 25	
							tv	rare	1882	May '80			
							tv	c	Mar. 1	Apr. 15, 26	Oct. 1	Nov. 1	
							av	once					
				tv	oc		tv	c	Mar. 1	Apr. 12	Oct. 1	Nov. 10	
				tv	unc		tv, sr	c, oc	Apr. 13, 15	May 10	Sept. 16	Oct. 20	May 10
							tv, res	unc, rare	Apr. 15, 26	May 10	Sept. 15	Nov. 1	
	rare		rare, Mar. 17	tv	rare		tv	c	Mar. 1, 15	Apr. 8, 15	Oct. 1	Nov. 1	
	rare	sr	unc	sr, breeds.	rare	Apr. 20, May 5	sr	c	Mar. 20, Apr. 1			Nov. 1	
							tv	fc			Oct. 15	Dec. 15	
							wv	unc		Apr. 10, 30	Oct. 13, Nov. 15		
				tv	fc		tv, wv	c, unc		May 11, 18	Oct. 15	Dec. 20	
							tv, wv	ab, oc			Oct. 15	Dec. 20	
							tv	c, irreg.	Apr	May	Oct. 15	Nov. 15	
				wv	c		wv	ab		May 1	Oct. 1, Nov. 1		
							wv	rare			20 Dec. '06		
	rare			tv	fc		tv	fc	Apr. 1, 10	May 10	Nov. 1	Dec. 1	
	rare			wv	fc		wv	fc		May 15	Oct. 15		
							wv	rare					
							tv	unc					
				tv	oc		tv	c	May 20	June 10	Oct. 20		
							tv	fc			Oct. 13		
				tv	oc		tv, sr	fc, rare	Mar. 20	Apr. 20	Oct. 10, 19	Nov. 1	yes
							tv	rare	Apr. 1				
	unc	tv	unc	tv	fc		tv	c	Feb. 20, Mar. 18	Apr. 10, May 1	Oct. 16	Nov. 15	
							av						
							tv	rare			26 Nov. '78	Dec. 77	
				tv	a		tv	rare	Mar. 25	Apr	Nov		
							av		May 11, 27, '07	May 1902			

SPECIES RECORDED	BRAISLIN, LONG ISLAND, 1907 (*continued*)				ALBANY						ALLEGANY		BROOME		CATTARAUGUS			CAYUGA						
	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Resident or transient	Common or rare	Resident or transient	Common or rare	Resident or transient	Common or rare	Arrives from south	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds
Holboell grebe	Apr. 7	Nov. 11			wv	rare									tv			wv	rare			Oct. 25		
Horned grebe	May 15	Oct. 15			tv	unc					tv	rare			tv, wv	fc		tv, ov	fc, oc	Apr. 3, 15		Sept. 8	Nov. 1	
Pied-billed grebe	Apr.	Aug. 15			tv, sr	fc, rare						oc	tv	oc	tv	fc		sr	fc	Mar. 2, Apr. 22			Oct. 16	
Loon	May 11	Aug. 10			tv	rare					tv	rare	tv	oc	tv	oc		tv, wv	fc, unc	Mar. 20, Apr. 15	May 29, June 17	Sept. 22	Nov. 1	
Black-throated loon	29 Apr. '03																							
Red-throated loon	May 11	Sept. 14	Dec. 30			once, '04												wv	rare		18 Feb. '99			
Puffin	Mar. 30	Dec. 15																						
Black guillemot																								
Brunnich murre	Mar 24	Nov. 22			wv	rare												wv	rare		Apr.	Dec. '00		
Razor-billed auk	Feb 6	Nov. 2																						
Dovekie	Mar. 1, 24	Nov. 18																av						
Skua																								
Pomarine jæger		July	Late Oct.																					
Parasitic jæger		Aug. 6	Nov. 9																					
Long-tailed jæger																								
Ivory gull		5 Jan. '03																						
Kittiwake	Feb. 27	Nov. 4																wv	rare			1 Jan. '54		
Glaucous gull	May 1	Jan. 2																						
Iceland gull	6 Feb '98				wv				21 Nov. '88															
Kumlien gull	8 Mar. '98				wv				22 Jan. '84															
Great black-backed gull	Mar. 13	Nov. 3																wv	unc					
Herring gull	Apr.	Oct.			tv	fc							tv	oc, Mar.	tv	oc		wv, tv	fc, c		May 6, 24	Sept.		
Ring-billed gull	May 15	Sept 5	Nov. 12															tv	unc	Mar. 3				
Laughing gull			Sept. 2																					
Bonaparte gull	May 11	Nov. 18									tv	rare			tv	oc		tv	fc	Apr. 24				
Little gull	10 May '02	15 Sept. '07																						
Sabine gull	July 37	6 Oct. '99																tv	rare	Oct. '87			Nov	
Gull-billed tern																								
Caspian tern		Sept. 3	Sept. 13																					
Royal tern																								
Cabot tern																								
Trudeau tern																								
Forster tern																								
Common tern			Oct. 15	yes	tv	rare												tv	oc					
Arctic tern		1 July '84																						
Roseate tern				June 19																				
Least tern																		av						
Sooty tern																		av					20 Sept. '76	
Black tern		July 21	Sept. 14		tv	once			12 Aug. '05						tv	oc		tv, sr	unc, rare					
Black skimmer			Oct. 12																					
Cory shearwater			Oct. 18																					
Greater shearwater			Nov																					
Audubon shearwater																								
Sooty shearwater			15 Aug '07																					
Black-capped petrel																		av	once	Sept. '03				
Scaled petrel					av				29 Sept. '90															
Leach petrel																								
Wilson petrel			Aug. 17																					
Yellow-billed tropic-bird																								
Booby																								
Gannet	May 9	Oct 5	Dec. 5															av	once					
Cormorant		Sept. 24	Nov. 8															tv	rare			20 Sept. '06		
Double crested cormorant	May 15	Aug. 26	Nov. 5		tv	rare			21 Sept. '88									tv	rare	1864		1888		
American white pelican																								
Brown pelican																								
Man-of-war bird																								
American merganser		Nov. 4	Dec. 30		wv	fc		Mar.		Nov.			wv	c	wv	fc		wv, sr	c, local, rare		Mar. 25, Apr. 27			yes
Red-breasted merganser	May 2	Oct 15	Dec. 25		tv, wv	fc, oc		May 17		Nov. 18					tv	oc		tv, wv	c, oc		May	Oct. 20		
Hooded merganser		Nov. 4	Dec. 14		tv	fc	Mar. 30	May 11		Nov. 12	tv	rare			tv	oc		tv, res	fc, oc	Mar. 30, Apr. 4	Apr. 20, May 5	Nov. 1, Oct. 20	Dec. 20	yes
Mallard	Apr.	Oct. 3	Dec. 24		tv	oc	Mar. 28	Apr. 22			tv	rare			tv	oc		tv	fc	Mar. 15	Apr. 15	Oct. 1, 29	Dec. 15	
Black duck				Apr. 5	tv	unc			Oct. 18	Nov. 18	tv	rare			tv	oc	Apr. 19	tv, res	ab, unc	Mar. 15, Apr. 1	Apr. 30	Oct. 1	Dec. 20	yes
Gadwall													sr	rare	tv, res	fc, rare		tv	unc	Mar.		Oct. 1	Nov. 1, 25	
Wigeon																		tv	rare	1882	May '80			
Baldpate	Apr 16	Aug. 9, Oct. 10	Feb. 5		tv	oc	Apr. 5			Sept. 27								tv	c	Mar. 1	Apr. 15, 26	Oct. 1	Nov. 1	
European teal		Dec. '00																wv	once					
Green-winged teal		Oct. 2	Nov. 30		tv	unc	Apr. 8		Oct. 10, 27	Nov. 17					tv	oc		tv	c	Mar. 1	Apr. 12	Oct. 1	Nov. 10	
Blue-winged teal	Apr. 21	Aug. 28	Oct. 25		tv	fc	Apr. 16		Aug. 27	Sept. 20					tv	unc		tv, sr	c, oc	Apr. 13, 15	May 10	Sept. 16	Oct. 20	May 10
Cinnamon teal																								
Shoveler		Oct 25	Nov. 29		tv	rare			Oct. 15	Nov. 7								tv, res	unc, rare	Apr. 15, 26	May 10	Sept. 15	Nov. 1	
Pintail	Mar. 6	Sept. 13	Oct. 25		tv	oc	Mar. 22		Sept. 22	Oct. 20								tv	c	Mar. 1, 15	Apr. 8, 15	Oct. 1	Nov. 1	
Wood duck			Nov. 27		tv	unc	Mar. 24		Sept. 29	Nov. 25, Dec. 3			rare, Mar. 17		tv	rare		tv	c	Mar. 20, Apr. 1			Nov. 1	
Ruddy-crested duck													sr	unc	sr, breeds	rare	Apr. 20, May 5	r	c					
Redhead	Mar. 22	Sept. 10	Jan. 9		tv	oc			Oct. 15	Nov. 12								tv	fc			Oct. 15	Dec. 15	
Canvas back		Oct. 22	Feb. 11															wv	unc		Apr. 10, 30	Oct. 11, Nov. 15		
American scaup duck	Apr. 22	Sept 1			tv	oc									tv	fc		tv, wv	c, unc		May 11, 18	Oct. 15	Dec. 20	
Lesser scaup duck	Apr 28	Oct 1			tv	unc	Apr. 10		Oct. 22	Nov. 10								tv, wv	ab, oc			Oct. 15	Dec. 20	
Ring-necked duck		1 Nov. '98			tv	rare	Mar. 22											tv	c, irreg	Apr.	May	Oct. 15	Nov. 15	
American golden-eye	Apr.	Dec. 5			wv	fc		Apr. 7, 16	Nov. 15						wv	c		wv	ab		May 1	Oct. 1, Nov. 1	
Barrow golden-eye					wv	rare			21 Jan. '87									wv	rare			20 Dec. '06		
Bufflehead	Apr 6	Dec. 8			tv	unc	Mar. 22	Apr. 28	Oct. 20	Nov. 15					tv	fc		tv	fc	Apr. 1, 10	May 10	Nov. 1	Dec. 1	
Old squaw	May 1	Oct. 15			tv, wv	fc		May 23	Oct. 30, Nov. 1, 15						wv	fc		wv	fc		May 15	Oct. 15		
Harlequin duck		9 Dec. '00																						
Labrador duck																								
American eider	25 Mar '94																							
King eider	Apr 21	Nov. 11																wv	rare					
American scoter	Apr. 17	Sept 17, Nov. 3			tv	oc			Sept. 24	Oct. 3								tv	unc			Oct. 20		
White-winged scoter	Apr. 11	Oct 15			tv	oc		May 25							tv	oc		tv	c	May 20	June 10	Oct. 13		
Surf scoter	Apr. 11	Sept. 1, Oct. 17			tv	unc			Sept. 29, Oct. 10	Oct. 15, 28					tv			tv	fc		Apr. 20	Oct. 10, 19	Nov. 1	yes
Ruddy duck	May 22	Oct. 17			tv	oc			Oct. 24	Nov. 1					tv	oc		tv, sr	fc, rare	Mar. 20				
Lesser snow goose																								
Greater snow goose		Oct. 8, Nov. 18	Nov. 24, Jan. 30																					
Blue goose																								
Am. white-fronted goose		18 Oct. '89																tv	rare	Apr. 1				
Canada goose	Apr. 28	Oct. 1	Dec. 31		tv	unc					tv	unc	tv	unc	tv	fc		tv	c	Feb. 20, Mar. 18	Apr. 10, May 1	Oct. 16	Nov. 15	
Hutchins goose																		av						
White-fronted brant	May 10	Nov. 18	Jan. 1															tv	rare			26 Nov. '78	Dec. 77	
Black brant																								
Barnacle goose																								
Whistling swan																		tv	rare	Mar. 25	Apr.	Nov		
Trumpeter swan																								
White ibis															tv	a								
Glossy ibis																				May 11, 27, '07	May 1902			
White-faced glossy ibis																		av						

SPECIES RECORDED	CHAUTAUQUA						CHEMUNG		CHENANGO		
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Resident or transient	Common or rare	Resident or transient	Common or rare	Arriv fro sou
Holboell grebe	wv	rare			*Oct. 27, 20 Feb. '96						
Horned grebe	tv	fc	Mar. 27	Apr. 17, 24	Oct. 22, 29	Dec. 8					
Pied-billed grebe	tv, sr	fc, rare	Apr. 16		Aug. 8, 26	Nov. 14			tv	unc	
Loon	tv	oc	Apr. 25, May 4	May 31	Sept. 25	Nov. 18			tv	unc	
Black-throated loon											
Red-throated loon	tv	rare	Feb. 16, 25		Oct 23, Nov. 19						
Puffin											
Black guillemot											
Brunnich murre											
Razor-billed auk											
Dovekie											
Skua											
Pomarine jæger											
Parasitic jæger											
Long-tailed jæger											
Ivory gull											
Kittiwake											
Glaucous gull											
Iceland gull											
Kumlien gull											
Great black-backed gull											
Herring gull	tv, wv	c, unc									
Ring-billed gull											
Laughing gull											
Bonaparte gull	tv	fc							tv	16 Jan. '97	
Little gull											
Sabine gull											
Gull-billed tern											
Caspian tern	tv	rare									
Royal tern											
Cabot tern											
Trudeau tern											
Forster tern	tv										
Common tern	tv	oc									
Arctic tern											
Roseate tern											
Least tern											
Sooty tern											
Black tern	tv	oc									
Black skimmer											
Cory shearwater											
Greater shearwater											
Audubon shearwater											
Sooty shearwater											
Black-capped petrel											
Scaled petrel											
Leach petrel											
Wilson petrel											
Yellow-billed tropic-bird											
Booby											
Gannet											
Cormorant											
Double-crested cormorant	tv	rare									
American white pelican	av	once	1860								
Brown pelican											
Man-o'-war bird											
American merganser	tv	fc					tv	unc			
Red-breasted merganser	tv	fc							tv	rare	Apr. 1
Hooded merganser	tv	oc									
Mallard	tv	fc									
Black duck	tv, wv	c					tv	unc			
Gadwall	tv	rare									
Widgeon											
Baldpate	tv	unc									
European teal											
Green-winged teal	tv	unc									
Blue-winged teal	tv	unc									
Cinnamon teal											
Shoveler	tv	unc									
Pintail	tv	unc									
Wood duck	sr	fc					tv	unc	tv	oc	
Rufous-crested duck											
Redhead	tv	unc									
Canvasback		rare									
American scaup duck	tv	fc									
Lesser scaup duck	tv	fc									
Ring-necked duck											
American golden-eye	wv	fc									
Barrow golden-eye											
Buffle-head	tv	unc									
Old squaw	tv	fc									
Harlequin duck											
Labrador duck											
American eider											
King eider											
American scoter											
White-winged scoter	tv	oc							tv	once, '98	
Surf scoter											
Ruddy duck	tv	c									
Lesser snow goose											
Greater snow goose											
Blue goose											
Am. white-fronted goose											
Canada goose	tv	unc					tv	unc	tv	unc	22 Feb
Hutchins goose											
White-bellied brant											
Black brant											
Barnacle goose											
Whistling swan	tv	rare									
Trumpeter swan											
White ibis											
Glossy ibis	av	once, Apr. '94									
White-faced glossy ibis											

	CLINTON	COLUMBIA	CORTLAND					DELAWARE			DUTCHESS	
ent ent	Common or rare	Resident or transient	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Resident or transient	Common or rare	Arrives from south	Resident or transient	Common or rare
			tv	oc	Feb. 7, 19	7 May '98						
	unc	tv	tv	fc				tv			tv	unc
	fc	tv	tv, sr	fc, rare				tv				unc
	fc		tv	fc	Apr.	May		tv			tv	
											wv	twice, 14 Nov.'76
	rare, 24 Dec. '06		av	once	2 Dec. '07						wv	Dec. '94
	c	tv	tv	unc	Mar. 21			tv			tv	fc
		tv	tv	oc				tv			tv	
		av, 17 Oct. '89										
	c, oc	tv	wv	c		Apr. 21, 28	Jan. 13, Feb. 11	wv			wv	
	c	tv	tv	fc				tv			tv	
		tv	tv	c	Mar. 21, Apr. 14	Apr. 11	Aug. 31	tv				
		tv	tv	fc			Oct. 8	tv			tv	
	c, oc	tv	tv, sr	c	Mar. 28	Apr. 16		tv		Apr. 5	tv	c
			tv	rare	30 Mar. '07							
											tv	
											tv	
		tv	tv	fc				tv			tv	fc
		tv	tv	fc				tv				
			tv	rare								
		tv	tv	rare	Apr. 7			tv			tv	
	fc, oc	sr	sr	unc				sr, breeds		Feb.	sr.	rare
		tv	tv	rare								
			tv	rare							tv	
			tv	rare	13 Feb. '00							
	c	tv	tv	fc							tv	
	c	tv	tv	fc				tv			tv	
	c	wv	tv		15 July '99						wv	
	oc	tv	tv	rare				tv	5 Jan. '99		tv	
		tv	tv	fc	Mar. 23						wv	
	fc	tv	tv									
	fc	tv										
	oc											
	rare		tv	rare								
	fc	tv	tv	fc				tv			tv	
			av									

SPECIES RECORDED	CHAUTAUQUA						CHEMUNG		CHENANGO			CLINTON		COLUMBIA	CORTLAND					DELAWARE			DUTCHESS	
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Resident or transient	Common or rare	Resident or transient	Common or rare	Arrives from south	Resident or transient	Common or rare	Resident or transient	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Resident or transient	Common or rare	Arrives from south	Resident or transient	Common or rare
Holboell grebe	wv	rare			*Oct. 27, 20 Feb. '96																			
Horned grebe	tv	fc	Mar. 27	Apr. 17, 24	Oct. 22, 29	Dec. 8									tv	oc	Feb. 7, 19	7 May '98						
Pied-billed grebe	tv, sr	fc, rare	Apr. 16		Aug. 8, 26	Nov. 14			tv	unc		tv	unc	tv	tv	fc				tv			tv	unc
Loon	tv	oc	Apr. 25, May 4	May 31	Sept. 25	Nov. 18			tv	unc		tv	fc	tv	tv, sr	fc, rare				tv			tv	unc
Black-throated loon												tv	fc		tv	fc	Apr	May		tv			tv	
Red-throated loon	tv	rare	Feb. 16, 25		Oct 23, Nov. 19																			
Puffin																							wv	twice, 14 Nov. '76
Black guillemot																								
Brünnich murre																								
Razor-billed auk												wv	rare, 24 Dec. '06		av	once	2 Dec. '07						wv	Dec. '94
Dovekie																								
Skua																								
Pomarine jæger																								
Parasitic jæger																								
Long tailed jæger																								
Ivory gull																								
Kittiwake																								
Glaucous gull																								
Iceland gull																								
Kumlien gull																								
Great black-backed gull																								
Herring gull	tv, wv	c, unc																						
Ring-billed gull												tv	c	tv	tv	unc	Mar. 21			tv			tv	fc
Laughing gull																								
Bonaparte gull	tv	fc							tv	16 Jan. '97				tv	tv	oc				tv			tv	
Little gull																								
Sabine gull																								
Gull-billed tern	tv	rare																						
Caspian tern																								
Royal tern																								
Cabot tern																								
Trudeau tern																								
Forster tern	tv																							
Common tern	tv	oc																						
Arctic tern																								
Roseate tern																								
Least tern																								
Sooty tern																								
Black tern	tv																							
Black skimmer																								
Cory shearwater																								
Greater shearwater																								
Audubon shearwater																								
Sooty shearwater																								
Black-capped petrel																								
Sealed petrel																								
Leach petrel																								
Wilson petrel																								
Yellow-billed tropic bird														av, 17 Oct. '89										
Booby																								
Gannet																								
Cormorant																								
Double-crested cormorant	tv	rare																						
American white pelican	av	once	1860																					
Brown pelican																								
Man-o'-war bird																								
American merganser	tv	fc										tv, sr	c, oc	tv	wv	c		Apr. 21, 28	Jan. 13, Feb. 11	av			wv	
Red-breasted merganser	tv	f										tv	c	tv	tv	fc				tv			tv	
Hooded merganser	tv	oc					tv	unc						tv	tv	c	Mar. 21, Apr. 14	Apr 11	Aug. 11	tv			tv	
Mallard	tv	fc							tv	rare	Apr. 1			tv	tv	fc			Oct 8	tv		Apr 5	tv	
Black duck	tv, wv	c										tv, sr	c, oc	tv	tv, sr	c	Mar 28	Apr. 16						
Gadwall															tv	rare	30 Mar. '07						tv	
Widgeon	tv	rare					tv	unc																
Baldpate												tv											tv	
European teal	tv	unc																		tv			tv	fc
Green-winged teal	tv	unc												tv	tv	fc				tv				
Blue-winged teal	tv	unc												tv	tv	fc								
Cinnamon teal																								
Shoveler	tv	unc										tv			tv	rare				tv			tv	
Pintail	tv	unc										tv	rare,	Apr. 7						tv, breeds		Feb.		rare
Wood duck	tv	fc										tv, sr	fc, oc	tv	tv	rare								
Redhead	tv	unc					tv	unc	tv	oc					sr	unc							tv	
Canvasback		rare										tv		tv	tv	rare								
American scaup duck	tv	fc										tv		tv	tv	rare	13 Feb. '00						t	
Lesser scaup duck	tv	fc										tv	c	tv	tv	fc				tv			tv	
Ring-necked duck												tv	c	tv	tv	fc								
American golden-eye	wv	fc										tv	c	wv	tv		15 July '09						wv	
Barrow's golden-eye												av	oc	tv	tv	rare				tv	c Jan. '99		tv	
Bufflehead	tv	unc												tv	tv	fc	Mar. 23						wv	
Old squaw	tv	fc																						
Harlequin duck																								
Labrador duck																								
American eider																								
King eider																								
American scoter																								
White-winged scoter	tv																							
Surf scoter																								
Ruddy duck	tv											tv												
Lesser snow goose									tv	once, '08		tv	fc	tv	tv									
Greater snow goose												tv	fc	tv										
Blue goose												tv	c											
Am. white fronted goose																								
Canada goose	tv	unc											rare		tv	rare								
Hutchins's goose																								
White-bellied brant												tv	fc	tv	tv	fc				tv			tv	
Black brant							tv	unc	tv	unc	22 Feb '00													
Barnacle goose															av									
Whistling swan	tv	rare																						
Trumpeter swan																								
White ibis																								
Glossy ibis	av	once, Apr. '04																						
White-faced glossy ibis																								

SPECIES RECORDED	ERIE									
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south
Holboell grebe	wv	unc		May	Oct					
Horned grebe	tv, wv	c, oc	Mar. 27, Apr. 2	May 10, 25	Oct. 5, 15	Nov. 30		tv	unc	
Pied-billed grebe	tv, sr	c, rare	Apr. 10				yes	sr, tv	unc, c	May 3
Loon	tv, wv	fc, rare	Apr	May	Oct	Nov. 30		tv, sr	fc, rare	May 3
Black-throated loon										
Red-throated loon	wv	unc		May 20	Oct. 20					
Puffin										
Black guillemot										
Brünnich murre	wv	oc			Nov. 25, Dec. 10, 14					
Razor-billed auk										
Dovekie										
Skua	av	once	spring, '86							
Pomarine jæger	tv	oc								
Parasitic jæger	tv	rare			2 Oct. '95					
Long-tailed jæger										
Ivory gull										
Kittiwake	wv	rare			Oct. 17					
Glaucous gull				22 Feb. '99	29 Jan. '95, 13 Feb. '98					
Iceland gull										
Kümlien gull										
Great black-backed gull	wv	oc		Feb. 22	Jan., Feb. 19					
Herring gull	tv, wv	c, fc		May 25, June 15	Aug. 1, 14			tv, sr	c, oc	Apr. 26
Ring-billed gull	tv	fc	Mar. 1, 20	Apr. 15, 30	Oct	Nov. 15		tv	oc	
Laughing gull	av									
Bonaparte gull	tv	fc	Apr. 13, 20	May 12, 30	Oct. 1, 10	Nov. 15		tv		
Little gull										
Sabine gull										
Gull-billed tern										
Caspian tern	tv	rare			Aug. 21, 24	Sept. 20, 27				
Royal tern										
Cabot tern										
Trudeau tern										
Forster tern										
Common tern	tv, sr	fc, rare	Apr. 15, May 10	June 15	Aug	Oct. 10	(?) yes			
Arctic tern	av	once								
Roseate tern	av	once								
Least tern	tv	rare								
Sooty tern								av	6 Sept. '76	
Black tern	tv	unc	May 1, 15	June 1, 20	Aug. 25, Sept. 12	Sept. 20, Oct. 2		tv		
Black skimmer										
Cory shearwater										
Greater shearwater										
Audubon shearwater										
Sooty shearwater										
Black-capped petrel										
Scaled petrel										
Leach petrel										
Wilson petrel										
Yellow-billed tropic-bird										
Booby										
Gannet										
Cormorant	av									
Double-crested cormorant	tv	oc			Oct. 11	Nov. 3				
American white pelican	av	once			5 Oct. '94			av	once	
Brown pelican										
Man-o'-war bird										
American merganser	tv, wv	fc, oc	Apr. 5		Nov. 1			sr, tv	fc, c	Mar. 26, 3
Red-breasted merganser	tv, wv, sr	c, oc, rare	Mar., Apr		Oct. 15	Nov. 20	yes	sr, tv	oc, c	Mar. 23
Hooded merganser	tv, sr	fc, oc	Mar. 25, Apr. 10	May 5, 15			yes	tv, sr	fc, rare	
Mallard	tv, res	fc, rare	Mar. 31				May 10	tv		
Black duck	tv, res	c, unc	Mar. 10, 25	Apr. 20, 30			yes	tv, sr	fc, rare	Apr. 1, Ma
Gadwall	tv	rare						tv	once	Apr. '82
Widgeon										
Baldpate	tv	fc	Mar. 20, Apr. 1		Oct			tv		
European teal										
Green-winged teal	tv	fc	Mar. 20, Apr. 5	Apr. 20	Sept. 20, 30	Dec. 5	yes, once			
Blue-winged teal	tv, sr	fc, rare	Apr. 12, 25		Sept. 1, 15	Oct. 10	yes	tv		
Cinnamon teal										
Shoveler	tv	rare			Sept. 12, 29	Nov. 2		tv		
Pintail	tv	c	Mar. 15	Apr. 20	Oct			tv	rare	
Wood duck	sr	unc	Apr. 1			Oct	May	sr	rare	Apr. 15
Rufous-crested duck										
Redhead	tv, wv	c, oc		Apr	Oct			tv	rare	
Canvasback	tv, wv	oc	Feb. 3, 13					tv	rare	
American scaup duck	tv, wv	c, fc		May	Oct. 20			tv	fc	
Lesser scaup duck	tv, sr	c, rare		Apr	Oct			tv	fc	
Ring-necked duck	tv	oc	Feb							
American golden-eye	wv	c		Apr	Oct. 20			tv, wr	fc	Mar. 3, Ap
Barrow golden-eye										
Buffle-head	tv, wv	c, oc	Apr. 6, 10		Oct. 15			tv		
Old squaw	wv	c		May 20	Oct			tv		
Harlequin duck	wv	once								
Labrador duck										
American eider	wv	rare								
King eider	wv	oc			Nov. 26, Dec			wv	rare	
American scoter	tv	ab, fall			Sept. 19, 25			tv		
White-winged scoter	tv	c, fall						tv	c	
Surf scoter	tv	unc						tv		
Ruddy duck	tv	fc	Apr. 1, 10		Oct					
Lesser snow goose										
Greater snow goose	tv	rare						tv	rare	
Blue goose										
Am. white-fronted goose	tv	rare								
Canada goose	tv	c	Feb. 24, Mar. 20	Apr. 10, 30	Oct. 13, 20	Nov		tv	unc	Mar. 20
Hutchins goose										
White-bellied brant	av									
Black brant										
Barnacle goose										
Whistling swan	tv	unc						av		
Trumpeter swan										
White ibis										
Glossy ibis										
White-faced glossy ibis	av	once	Aug. '44							

		FRANKLIN					FULTON		GENESEE			
rns n th	Breeds	Resident or transient	Common or rare	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Resident or transient	Common or rare	Arrives from south	Breeds
							tv	oc	tv	fc	Apr. 11	
	yes	tv, sr	c, rare		Sept. 12, 17	yes	tv	unc	tv, sr	fc, local		
	yes	tv, sr	c, unc		Sept. 2, 17	yes	tv, sr	unc, oc	tv	unc	Apr. 11	
									wv	rare, Dec. 22		
							av	1895				
		wv	once									
	12 May '05	sr	unc			yes	sr	unc	tv	unc		
		tv										
76												
62		tv	rare	24 Sept. '79								
	yes	sr	unc			yes			tv		Mar. 24	
	yes	tv	oc	Sept. 7								
		tv, sr	c, unc	Aug. 19	Sept. 19	yes						
	yes	tv, sr	c, unc	Aug. 19	Sept. 19	yes, 1 May '98	tv, sr	oc	tv			
							sr, breeds	oc	tv, sr	c, rare		yes
		tv	c	19 Sept. '96			tv	c				
5							tv	fc				
	yes						sr	rare, Apr				
							tv	rare				
		tv		Sept. 14								
									tv	fc	Apr. 13, 16	
									tv		Apr. 9	
4												
		tv		Sept. 20								
							tv		tv		Mar. 4, 15	

SPECIES RECORDED	ERIE							ESSEX					FRANKLIN					FULTON		GENESEE			
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Returns from north	Breeds	Resident or transient	Common or rare	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Resident or transient	Common or rare	Arrives from south	Breeds
Holboell grebe	wv	unc		May	Oct																		
Horned grebe	tv, wv	c, oc	Mar. 27, Apr. 2	May 10, 25	Oct. 5, 15	Nov. 30		tv	unc									tv	oc	tv	fc	Apr. 11	
Pied-billed grebe	tv, sr	c, rare	Apr. 10				yes	sr, tv	unc, c	May 3			tv, sr	c, rare		Sept. 12, 17	yes	tv	unc	tv, sr	fc local		
Loon	tv, wv	fc, rare	Apr.	May	Oct.	Nov. 30		tv, sr	fc, rare	May 3		yes	tv, sr	c, unc		Sept. 2, 17	yes	tv, sr	unc, oc	tv	unc	Apr 11	
Black-throated loon																							
Red-throated loon	wv	unc		May 20	Oct. 20															wv	rare, Dec 22		
Puffin																							
Black guillemot																							
Brunnich murre	av	c			Nov. 25, Dec. 10, 14													av	1895				
Razor-billed auk																							
Dovekie																							
Skua	av	once	spring, '86																				
Pomarine jaeger	tv	c																					
Parasitic jaeger	tv	rare			2 Oct. '95																		
Long-tailed jaeger																							
Ivory gull																							
Kittiwake	wv	rare			Oct. 17																		
Glaucous gull				22 Feb. '99	29 Jan. '95, 13 Feb. '98								wv	once									
Iceland gull																							
Kumlien gull																							
Great black-backed gull	av	c		Feb. 22	Jan., Feb. 19																		
Herring gull	tv, wv	fc, fc		May 25, June 15	Aug. 1, 14			tv, sr	c, oc	Apr. 26		12 May '05	sr	unc			yes	sr	unc	tv	unc		
Ring-billed gull	tv	fc	Mar. 1, 20	Apr. 15, 30	Oct.	Nov. 15		tv	oc														
Laughing gull	av																						
Bonaparte gull	tv	fc	Apr. 13, 20	May 12, 30	Oct. 1, 10	Nov. 15		tv					tv										
Little gull																							
Sabine gull																							
Gull-billed tern																							
Caspian tern	tv	rare			Aug 21, 24	Sept. 20, 27																	
Royal tern																							
Cabot tern																							
Trudeau tern																							
Forster tern																							
Common tern	tv, sr	fc, rare	Apr. 15, May 10	June 15	Aug	Oct. 10	(?) yes																
Arctic tern	av	once																					
Roseate tern	av	once																					
Least tern	tv	rare																					
Sooty tern																							
Black tern	tv	unc	May 1, 15	June 1, 20	Aug. 25, Sept. 12	Sept. 20, Oct. 2		av	6 Sept. '76		18 Aug. '76												
Black skimmer								tv															
Cory shearwater																							
Greater shearwater																							
Audubon shearwater																							
Sooty shearwater																							
Black-capped petrel																							
Scaled petrel																							
Leach petrel																							
Wilson petrel																							
Yellow-billed tropic-bird																							
Booby																							
Gannet																							
Cormorant	av																						
Double-crested cormorant	tv	oc			Oct. 11	Nov. 3					15 Oct. '02		tv	rare	24 Sept. '79								
American white pelican	av	once			5 Oct. '94			av	once														
Brown pelican																							
Man-o'-war bird																							
American merganser	tv, wv	fc, oc	Apr. 5		Nov. 1			sr, tv	fc, c	Mar. 26, 30		yes	sr	unc			yes			tv		Mar. 24	
Red-breasted merganser	tv, wv, sr	c, oc, rare	Mar., Apr.		Oct. 15	Nov. 20	yes	sr, tv	oc, c	Mar. 23		yes	tv	oc	Sept. 7								
Hooded merganser	tv, sr	fc, oc	Mar. 25, Apr. 10	May 5, 15			yes	tv, sr	fc, rare				tv, sr	c, unc	Aug 19	Sept. 19	yes	tv, sr	oc	tv			yes
Mallard	tv, res	fc, rare	Mar. 31				May 10	tv				yes	tv, sr	c, unc	Aug. 19	Sept. 19	yes, 1 May '98	r. breeds	oc	tv, sr	c, rare		
Black duck	tv, res	c, unc	Mar. 10, 25	Apr. 20, 30			yes	tv, sr	fc, rare	Apr. 1, Mar. 10													
Gadwall	tv	rare						tv	once	Apr. '82													
Widgeon																							
Baldpate	tv	fc	Mar. 20, Apr. 1		Oct.			tv															
European teal																							
Green-winged teal	tv	fc	Mar. 20, Apr. 5	Apr. 20	Sept 20, 30	Dec. 5	yes, once						tv	c	19 Sept. '96			tv	c				
Blue-winged teal	tv, sr	fc, rare	Apr. 12, 25		Sept. 1, 15	Oct. 10	yes	tv										tv	fc				
Cinnamon teal																							
Shoveler	tv	rare			Sept. 12, 20	Nov. 2		tv			5 Oct. '85												
Pintail	tv	c	Mar. 15	Apr. 20	Oct.			tv	rare									sr	rare, Apr.				
Wood duck	sr	unc	Apr. 1			Oct.	May	sr	rare	Apr. 15		yes											
Ruffed grouse																		tv	rare				
Redhead	tv, wv	c, oc		Apr.	Oct.			tv	rare														
Canvasback	tv, wv	oc	Feb. 3, 13					tv	rare														
American scaup duck	tv, wv	c, fc		May	Oct. 20			tv	fc														
Lesser scaup duck	tv, sr	c, rare		Apr.	Oct.			tv	fc														
Ring-necked duck	tv	oc	Feb.					tv															
American golden-eye	wv			Apr.	Oct. 20			tv, wr	fc	Mar. 3, Apr. 1			tv		Sept 14					tv	fc	Apr. 13, 16	
Barrow's golden-eye																				tv		Apr 9	
Buffle head	tv, wv	c, oc	Apr. 6, 10		Oct. 15			tv															
Old squaw	wv	c		May 20	Oct.			tv															
Harlequin duck	wv	once																					
Labrador duck																							
American eider	wv	rare																					
King eider	wv	c			Nov. 26, Dec.			wv	rare		3 Dec. '04												
American scoter	tv	ab, fall			Sept. 19, 25			tv															
White-winged scoter	tv	c, fall						tv	c														
Surf scoter	tv	unc						tv					tv		Sept. 20								
Ruddy duck	tv	fc	Apr. 1, 10		Oct.																		
Lesser snow goose								tv	rare														
Greater snow goose	tv	rare																					
Blue goose								tv	rare											tv		Mar 4, 15	
Am. white-fronted goose	tv	rare																					
Canada goose	tv	c	Feb 24, Mar 2	Apr. 10, 30	Oct. 11, 20	Nov.		tv	unc	Mar. 20								tv					
Hutchins's goose																							
White-bellied brant	av																						
Black brant																							
Barnacle goose																							
Whistling swan	tv	unc																					
Trumpeter swan																							
White ibis								av															
Glossy ibis																							
White-faced glossy ibis	av	once	Aug '44																				

SPECIES RECORDED	GREENE		HAMILTON			HERKIMER				
	Resident or transient	Common or rare	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Arrives from south	Departs for south	Bree
Holboell grebe										
Horned grebe			tv	c		tv	fc	Apr. 8	Nov. 8	
Pied-billed grebe			sr	unc, breeds		tv, sr	fc, oc	Apr. 10	Nov	
Loon			sr	unc		sr	fc			
Black-throated loon										
Red-throated loon			tv	unc		tv	oc			
Puffin										
Black guillemot										
Brünnich murre										
Razor-billed auk										
Dovekie										
Skua										
Pomarine jæger										
Parasitic jæger						tv	rare		22 Aug. '86	
Long-tailed jæger										
Ivory gull										
Kittiwake										
Glaucous gull										
Iceland gull										
Kumlien gull										
Great black-backed gull										
Herring gull						sr	fc			yes
Ring-billed gull										
Laughing gull										
Bonaparte gull						tv				
Little gull										
Sabine gull										
Gull-billed tern										
Caspian tern										
Royal tern										
Cabot tern										
Trudeau tern										
Forster tern										
Common tern										
Arctic tern										
Roseate tern										
Least tern										
Sooty tern										
Black tern										
Black skimmer										
Cory shearwater										
Greater shearwater										
Audubon shearwater										
Sooty shearwater										
Black-capped petrel										
Scaled petrel										
Leach petrel										
Wilson petrel										
Yellow-billed tropic-bird										
Booby										
Gannet										
Cormorant										
Double-crested cormorant										
American white pelican										
Brown pelican										
Man-o'-war bird										
American merganser			sr	fc	May 5	sr, wv	fc, local		Nov	May 1
Red-breasted merganser			sr, tv	oc, c	May 1, 15	tv, res	c, oc			May 1, 1
Hooded merganser			sr	unc	May 10	sr	oc		Oct. 26	June 1
Mallard	tv		tv	rare		tv	rare			
Black duck	tv, sr	fc, rare	sr	fc	May 10	tv, res	c, unc			
Gadwall										
Widgeon										
Baldpate										
European teal										
Green-winged teal	tv		tv	unc		tv	fc			
Blue-winged teal	tv		tv	unc		tv	fc			
Cinnamon teal										
Shoveler	tv	rare								
Pintail	tv					tv	rare			
Wood duck	tv		sr	rare		sr	unc			
Rufous-crested duck										
Redhead	tv	fc								
Canvasback	tv	rare								
American scaup duck	tv									
Lesser scaup duck	tv									
Ring-necked duck										
American golden-eye	wv		tv, sr	fc, rare	yes	tv, sr	c, oc			yes
Barrow golden-eye										
Buffle-head	tv		tv			tv		Apr. 25		
Old squaw	tv, wv	c, oc	tv			tv			Oct. 31	
Harlequin duck										
Labrador duck										
American eider										
King eider										
American scoter			tv	rare		tv			Oct. 29	
White-winged scoter			tv	fc		tv				
Surf scoter			tv	unc		tv				
Ruddy duck	tv									
Lesser snow goose										
Greater snow goose										
Blue goose										
Am. white-fronted goose										
Canada goose	tv		tv	unc		tv	fc			
Hutchins goose										
White-bellied brant						av				
Black brant										
Barnacle goose										
Whistling swan			sr	formerly						
Trumpeter swan										
White ibis										
Glossy ibis										
White-faced glossy ibis										

JEFFERSON					KINGS–QUEENS–NASSAU					
dent r sient	Common or rare	Arrives from south	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south
					wv	rare		Mar. 20, Apr.	Oct. 22	
	c				tv, wv	fc, oc			22 Nov. '94	
	c, unc			yes	sr, tv	oc, c				
	c, rare			yes	tv, wv	c, fc				
					wv	oc			Sept. 19, Oct. 11	
	rare		4 Dec. '00		wv	oc		Feb. 20	24 Dec. '94, 1 Jan. '91	
					wv	rare				
					tv	oc			Aug. 2, 6	
					tv	unc			July 29, Sept. 10	
					wv	fc			Nov. 4, 24	
					wv	rare		11 Mar. '84	1 Jan. '91	
					wv	rare			6 Feb. '98	
					wv	rare		8 Mar. '98		
					wv	unc		Feb. 7, 13, 22	Aug. 8, Nov. 1	
	c				wv	ab		May	July	
					wv	fc		Apr.	Sept	
					sr	unc				
	fc				tv, wv	c, oc		Apr.	22 Nov. '94	
					av	once		10 May '02		
					av		July 1, 4			
					tv	rare				
					tv	rare			3 Sept. '73	1 Oct. '72
	oc				sr, tv	unc, c	May 15, 23		Aug	Aug. 16, Sept. 5
					tv, sr	unc, formerly			Aug. 8	
	local	May 10, 22	Sept. 1, 10	June 1-30, 50 pairs	tv	oc			July 12, 28	Aug. 31, Sept. 6
					av		July 26, Aug. 2			Sept. 3
					sv	rare				
					tv					
					sv	oc	July 20, 29			Aug. 7, 10
					tv	fc			Nov. 11, 20	
					tv					
	oc				tv				Nov. 20	
					av	twice	11 May '85			
					av	once				
	ab				wr	c		Apr. 29, May 10, 31	Nov. 3, 15, 29	
	c				tv	c				
	oc				res, tv	rare, unc		13 June '91, 2 ♀ s.	Nov. 19	
	rare				tv, wv	unc, rare		Apr.	Sept. 14, Oct. 17	Nov. 9, 25
	c, unc				tv, wv, res	ab, c, rare		Apr. 30, May 12	Aug. 11, Sept. 14, Nov. 1	
	fc				tv	oc				
					av					17 Dec. '00
	fc				tv	oc			Oct. 2	Nov., Dec. 17
	c, oc			yes	tv	fc, fall			Aug. 31, Sept. 1, 16	Oct. 30, Nov
	rare				tv	rare			Nov. 11	
	c				tv, wv	c, rare	Feb. 22	Apr. 6	Sept. 4, 16	
	fc				sr	rare				
	c				tv	oc				
	unc				tv	rare				
	c				tv	ab	Mar.		Oct	
	c				tv					
	c				wv	unc				
	fc									
	c				wv, tv	c, ab		May 1, 18, July 12	Nov. 4, 15	
					wv	rare			1877	
	fc				tv	ab				
	fc				tv	ab				
					tv	c				
					tv	c, fall				
	c				tv	fc	Mar. 16	Apr. 17	Nov	
					wv	unc				
					av	once			20 Oct. '76	
					av					24 Dec. '01
					av		19 Oct. '48			

SPECIES RECORDED	GREENE		HAMILTON			HERKIMER					JEFFERSON					KINGS-QUEENS-NASSAU					
	Resident or transient	Common or rare	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Arrives from south	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south
Holboell grebe																wv	rare		Mar. 20, Apr.	Oct. 22	
Horned grebe			tv	c		tv	fc	Apr. 8	Nov. 8		tv	c				tv, wv	fc, oc			22 Nov. '94	
Pied-billed grebe			sr	unc, breeds		tv, sr	fc, oc	Apr. 10	Nov.		tv, sr	c, unc			yes	sr, tv	oc, c				
Loon			sr	unc		sr	fc				tv, sr	c, rare			yes	tv, wv	c, fc				
Black-throated loon																					
Red-throated loon			tv	unc		tv	oc									wv	oc			Sept. 19, Oct. 11	
Puffin																					
Black guillemot																					
Brunnich murre											wv	rare		4 Dec. '00		wv	oc		Feb. 20	24 Dec. '94, 1 Jan. '91	
Razor-billed auk																					
Dovekie																wv	rare				
Skua																					
Pomarine jæger																tv	oc			Aug. 2, 6	
Parasitic jæger						tv	rare		22 Aug. '86							tv	unc			July 29, Sept. 10	
Long-tailed jæger																					
Ivory gull																					
Kittiwake																wv	fc			Nov 4, 24	
Glaucous gull																wv	rare		11 Mar. '84	1 Jan. '91	
Iceland gull																wv	rare			6 Feb. '98	
Kumlien gull																wv	rare		8 Mar. '98		
Great black-backed gull																wv	unc		Feb. 7, 13, 22	Aug. 8, Nov. 1	
Herring gull						sr	fc			yes	tv	c				wv	ab		May	July	
Ring billed gull																wv	fc		Apr.	Sept	
Laughing gull																sr	unc				
Bonaparte gull						tv					tv	fc				tv, wv	c, oc		Apr.	22 Nov. '94	
Little gull																av	once		10 May '02		
Sabine gull																					
Gull billed tern																av		July 1, 4			
Caspian tern																tv	rare				
Royal tern																					
Cabot tern																					
Trudeau tern																					
Forster tern																tv	rare			3 Sept. '73	1 Oct. '72
Common tern											tv	oc				sr, tv	unc, c	May 15, 23		Aug	Aug. 16, Sept. 5
Arctic tern																					
Roseate tern																					
Least tern																tv, sr	unc, formerly			Aug. 8	
Sooty tern																					
Black tern											sr	local	May 10, 22	Sept. 1, 10	June 1-30, 50 pairs	tv	oc	July 26, Aug. 2		July 12, 28	Aug. 31, Sept. 6
Black skimmer																av					Sept. 3
Cory shearwater																					
Greater shearwater																sv	rare				
Audubon shearwater																					
Sooty shearwater																					
Black capped petrel																					
Scaled petrel																					
Leach petrel																tv					Aug. 7, 10
Wilson petrel																sv	oc	July 20, 29			
Yellow-billed tropic-bird																					
Booby																					
Gannet																tv	fc			Nov. 11, 20	
Cormorant																tv					
Double-crested cormorant											tv	oc				tv				Nov. 20	
American white pelican																av	twice	11 May '85			
Brown pelican																av	once				
Man-o'-war bird			sr	fc	May 5	sr, wv	fc, local		Nov	May 1	tv	ab							Apr. 20, May 10, 31	Nov. 3, 15, 29	
American merganser			sr, tv	oc, c	May 1, 15	tv, res	c, oc			May 1, 15	tv	c				wr	c				
Red-breasted merganser			sr	unc	May 10	sr	oc		Oct. 26	June 1	sr	oc				tv	c		13 June '91, 2 Q s.	Nov. 10	
Hooded merganser			tv	rare		tv	rare				tv	rare				res, tv	rare, unc		Apr.	Sept. 14, Oct. 17	Nov. 9, 25
Mallard	tv		sr	fc	May 10	tv, res	c, unc				tv, res	c, unc				tv, wv	unc, rare		Apr. 30, May 12	Aug. 12, Sept. 14, Nov. 1	
Black duck	tv, sr	fc, rare														tv, wv, res	ab, c, rare				
Gadwall																					
Widgeon																					
Baldpate											tv	fc				tv	oc				17 Dec. '00
European teal																av				Oct. 2	Nov., Dec. 17
Green-winged teal	tv		tv	unc		tv	fc				tv	fc				tv	oc			Aug. 31, Sept. 1, 16	Oct. 30, Nov
Blue-winged teal	tv		tv	unc		tv	fc				tv, sr	c, oc			yes	tv	fc, fall				
Cinnamon teal																				Nov. 11	
Shoveler	tv	rare									tv	rare				tv	rare			Sept. 4, 16	
Pintail	tv					tv	rare				tv	c				tv, wv	c, rare	Feb. 22	Apr. 6		
Wood duck	tv		sr	rare		sr	unc				sr	fc				sr	rare				
Ruddy-crested duck																					
Redhead	tv	fc									tv	c				tv	oc				
Canvasback	tv	rare									tv	unc				tv	rare			Oct.	
American scaup duck	tv										tv	c				tv	ab	Mar.			
Lesser scaup duck	tv										tv	c				tv					
Ring-necked duck																					
American golden-eye	wv		tv, sr	fc, rare	yes	tv, sr	c, oc			yes	tv	c				wv	unc				
Barrow golden-eye																					
Bufflehead	tv		tv			tv		Apr. 25	Oct. 31		tv	fc							May 1, 18, July 12	Nov. 4, 15	
Old squaw	tv, wv	c, oc	tv			tv					tv	c				wv, tv	c, ab				
Harlequin duck																				1877	
Labrador duck																					
American eider																wv	rare				
King eider																					
American scoter			tv	rare		tv			Oct. 20		tv	fc				tv	ab				
White-winged scoter			tv	fc		tv					tv	fc				tv	ab				
Surf scoter	tv		tv	unc		tv					tv					tv	c				
Ruddy duck											tv					tv	c, fall				
Lesser snow goose																					
Greater snow goose																					
Blue goose																					
Am. white fronted goose																				Nov	
Canada goose	tv		tv	unc		tv					tv	c				tv	fc	Mar. 16	Apr. 17		
Hutchins goose																					
White-bellied brant						av										wv	unc			20 Oct. '76	
Black brant																					24 Dec. '01
Barnack goose																av	once				
Whistling swan			sr	formerly												av					
Trumpeter swan																					
White ibis																					
Glossy ibis																		19 Oct '48			
White-faced glossy ibis																av					

SPECIES RECORDED	LEWIS						LIVINGSTON				
	Resident or transient	Common or rare	Arrives from south	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Resident or transient	Common or rare	Arriv fro sout
Holboell grebe	tv	unc	Apr. 18, 26						tv, wv	unc	Apr.
Horned grebe	tv		Apr. 26		Oct. 11, Nov. 12				tv	rare	3 Apr.
Pied-billed grebe	sr	fc	Mar., Apr. 2		Nov. 1				tv, sr, wv	ab, rare	
Loon	tv, sr	c, fc	Apr.		Nov. 24		tv	rare	tv	unc	
Black-throated loon											
Red-throated loon	tv								wv	rare	Feb. 1
Puffin											
Black guillemot											
Brünnich murre	wv	rare			Nov. 4, Dec. 4, 25				wv	oc	
Razor-billed auk											
Dovekie											
Skua											
Pomarine jæger											
Parasitic jæger											
Long-tailed jæger											
Ivory gull											
Kittiwake											
Glaucous gull											
Iceland gull	tv	rare	Apr. '78						wv	rare	
Kumlien gull											
Great black-backed gull											
Herring gull	tv	fc	Apr. 5, 15, 24				tv	oc	wv	fc	
Ring-billed gull											
Laughing gull											
Bonaparte gull	tv	fc	Apr. 23				tv	unc	tv	fc	
Little gull											
Sabine gull											
Gull-billed tern											
Caspian tern											
Royal tern											
Cabot tern											
Trudeau tern											
Forster tern											
Common tern											
Arctic tern											
Roseate tern											
Least tern											
Sooty tern											
Black tern	tv				8 Sept. '83						
Black skimmer											
Cory shearwater											
Greater shearwater											
Audubon shearwater											
Sooty shearwater											
Black-capped petrel									av		
Scaled petrel							av	once 5 Ap '80			
Leach petrel											
Wilson petrel											
Yellow-billed tropic-bird											
Booby											
Gannet											
Cormorant											
Double-crested cormorant											
American white pelican											
Brown pelican											
Man-o'-war bird											
American merganser	tv, sr	ab, unc	Feb., Mar. 5, Apr. 16		Nov. 3	yes	tv	rare	tv, wv	c, oc	
Red-breasted merganser	tv	c					tv		wv	c	
Hooded merganser	tv, sr	fc, unc	Apr. 2				tv		tv, wv	oc, rare	
Mallard	tv	rare					tv, sr	unc, rare	tv	fc	
Black duck	tv, res	c, unc	Mar. 13, Apr. 5, 16			yes	tv	fc	tv, wv	c, oc	Apr. 4
Gadwall											
Widgeon											
Baldpate	tv	rare					tv				
European teal											
Green-winged teal	tv	fc		Oct.	Nov., Dec.		tv		tv	c	Apr. 1
Blue-winged teal	tv	fc					tv		tv	c	Apr. 1
Cinnamon teal											
Shoveler											
Pintail	tv	rare					tv		tv	unc	
Wood duck	sr	fc	Mar., Apr. 1, 15		Oct. 13	yes	sr	rare	sr	rare	
Rufous-crested duck											
Redhead									tv	fc	
Canvasback							tv	rare	tv		
American scaup duck	tv	rare					tv		tv	c	
Lesser scaup duck	tv	fc					tv		tv	c	
Ring-necked duck									tv, wv	fc, oc	
American golden-eye	tv	fc		Apr.					tv, wv	c, unc	
Barrow golden-eye							tv				
Buffle-head	tv		Apr.				tv		tv	fc	
Old squaw	tv	fc	Apr. 14				tv				
Harlequin duck											
Labrador duck											
American eider											
King eider									wv	rare	
American scoter	tv	fc		Sept. 27					tv	rare	
White-winged scoter	tv	fc							tv	unc	
Surf scoter	tv										
Ruddy duck							tv		tv	fc	
Lesser snow goose											
Greater snow goose											
Blue goose											
Am. white-fronted goose											
Canada goose	tv	c	Apr. 18		Oct. 8, Nov. 14		tv	unc	tv	c	
Hutchins goose											
White-bellied brant									tv	rare	
Black brant									tv	rare	
Barnacle goose											
Whistling swan	tv	rare	Mar. 26				tv	rare			
Trumpeter swan											
White ibis											
Glossy ibis											
White-faced glossy ibis											

				MONROE							MONTGOMERY	
es h	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare
	Oct. 25			tv, wv	unc		May 1, 13	Oct. 20, Nov. 12				
				tv, wv	fc, unc	Mar. 20, Apr. 10	May 5, 15	Oct. 1, 12	Nov. 16, 30			
			yes	tv, sr	c, oc	Mar. 23, Apr. 15	May 11, 20	Sept. 10, 16	Nov. 1, 12	yes		
				tv, wv	fc, oc	Apr. 1, 12	May 10, 30	Oct. 1, 12	Nov. 12, 30			
	Oct.			tv, wv	fc, unc	Mar. 25	May 10, 30, July 17	Nov. 1, 12	Dec. 1			
				av	once			Feb. '88				
	26 Nov. '00			wv	oc			Nov. 25, Dec. 9, 17				
				av	once			Nov. '92				
				tv	rare							
				tv	rare			10 Nov. '97				
				tv	rare							
				wv	rare							
				wv	rare			22 Feb. '99				
	1 Feb. '84			wv	rare		14 Apr. '04	10 Sept. '99				
				wv	unc		10 Apr. '91	Dec.				
	Dec. 1			wv, tv	c, ab		May 16, 30	Aug. 1, 16			tv	unc
				tv, wv	c, oc	Apr. 6, 13	May 5, 16	Oct. 10, 25	Nov			
				av								
				tv	fc	Apr. 2, 10	May 22, June 8	Sept. 20, Oct. 10	Nov. 10, 25			
				tv	unc			Sept. 1, 2				
				tv	unc							
				av					8 Sept. '09			
				tv	unc	May 1, 12	May 20, 30	Aug. 20, Sept. 6	Sept. 13, 25			
		28 Aug. '93										
				av					Nov. '82			
				tv	oc	17 May '97		Nov				
	Nov			tv	fc		Apr., May	Nov			tv	rare
	Nov. 20			tv, wv	ab, fc	Mar. 28, Apr. 5	May 10, 30	Oct. 1	Dec		wv	unc
				tv	fc	Mar. 24. Apr. 2			Dec		tv	unc
	Sept. 15			tv, res	fc, oc	Mar. 20, Apr. 2	Apr. 15, May 10	Oct. 13, 21				
				tv, res	c, oc	Mar. 21, 30	Apr. 20, May 5	Sept. 1, 15, Oct. 1	Nov	yes	tv	unc
				tv	rare							
				tv	fc	Mar. 21, 30	Apr. 15, 30	Sept. 1, 15, Oct 6	Oct. 15		tv	
	Sept. 1	Oct. 20		tv	fc	Mar. 20, Apr. 5		Sept. 16	Oct. 30			
	Sept. 1	Oct. 20		tv, sr	c, oc	Apr. 20		Sept. 1	Oct. 10	yes	tv	
				tv	unc	Apr. 1	May 5	Sept. 15, 30	Oct. 15, 30			
	Sept. 20			tv	fc	Feb. 25, Mar. 20	Apr. 8, 20	Sept. 15, 30	Oct. 15, 25			
			yes	sr, tv	unc, fc	Mar. 28, Apr. 11			Oct	yes	sr	rare
				tv	fc			Oct. 8, 16	Nov. 10			
				tv, wv	unc		Apr	Nov. 9				
				tv, wv	c, unc		Apr	Oct. 16				
				tv	c	Mar. 20, Apr. 1	May 30	Oct. 6, 15	Nov. 30		tv	
				tv	unc	Mar		Oct	Dec. 10			
	Nov. 3			tv, wv	c, unc	Mar. 10, 20	Apr. 10, 30	Nov. 1, 25			wv	
				tv	fc	Mar. 20, Apr. 10	May 10, 25	Oct. 15, 30	Nov		tv	
				wv	c		May	Oct			tv	
				wv	rare							
				wv	oc		Feb. 9	22 Dec. '95				
				tv	oc							
				tv	c	May	June 10	Oct. 20, Sept. 15	Dec			
				tv	fc			Oct				
				tv, sr	fc, rare	Mar	May 10	Oct. 10, 20	Nov		tv	
				tv, wv	c, oc	Feb. 22, Mar. 15	Apr. 15, May 9	Oct. 6, 21	Nov			
	30 Oct. '91			av	once							
				tv	oc	Mar. 27, Apr. 2		2 Nov. '05				
				av	once							
				av	once							

SPECIES RECORDED	LEWIS						LIVINGSTON		MADISON							MONROE							MONTGOMERY	
	Resident or transient	Common or rare	Arrives from south	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare
Holboell grebe	tv	unc	Apr. 18, 26						tv, wv	unc	Apr.		Oct. 25			tv, wv	unc		May 1, 13	Oct. 20, Nov. 12				
Horned grebe	tv		Apr. 26		Oct. 11, Nov. 12				tv	rare	3 Apr. '98					tv, wv	fc, unc	Mar. 20, Apr. 10	May 5, 15	Oct. 1, 12	Nov. 16, 30			
Pied-billed grebe	sr	tc	Mar., Apr. 2		Nov. 1				tv, sr, wv	ab, rare					yes	tv, sr	c, oc	Mar. 23, Apr. 15	May 11, 20	Sept. 10, 16	Nov. 1, 12	yes		
Loon	tv, sr	c, fc	Apr.		Nov. 24		tv	rare	tv	unc						tv, wv	fc, oc	Apr. 1, 12	May 10, 30	Oct. 1, 12	Nov. 12, 30			
Black-throated loon																								
Red-throated loon	tv								wv	rare	Feb. 18		Oct.			tv, wv	fc, unc	Mar. 25	May 10, 30, July 17	Nov. 1, 12	Dec. 1			
Puffin																								
Black guillemot																av	once			Feb. '88				
Brunnich murre	wv	rare			Nov. 4, Dec. 4, 25				wv	oc			26 Nov. '00			wv	oc			Nov. 25, Dec. 9, 17				
Razor billed auk																								
Dovekie																av	once			Nov. '92				
Skua																								
Pomarine jæger																tv	rare							
Parasitic jæger																tv	rare			10 Nov. '07				
Long-tailed jæger																tv	rare							
Ivory gull																								
Kittiwake																wv	rare							
Glaucous gull																wv	rare			22 Feb. '99				
Iceland gull	tv	rare	Apr. '78						wv	rare			1 Feb. '84			wv	rare		14 Apr. '04	10 Sept. '99				
Kumlien gull																								
Great black-backed gull																wv	unc		10 Apr. '91	Dec.				
Herring gull	tv	fc	Apr. 5, 15, 24				tv	oc	wv	fc		Apr. 1	Dec. 1			wv, tv	c, ab		May 16, 30	Aug. 1, 16			tv	unc
Ring-billed gull																tv, wv	c, oc	Apr. 6, 13	May 5, 16	Oct. 10, 25	Nov.			
Laughing gull																av								
Bonaparte gull	tv	fc	Apr. 23				tv	unc	tv	fc		May				tv	fc	Apr. 2, 10	May 22, June 8	Sept. 20, Oct. 10	Nov. 10, 25			
Little gull																								
Sabine gull																								
Gull-billed tern																								
Caspian tern																tv	unc			Sept. 1, 2				
Royal tern																								
Cabot tern																								
Trudeau tern																								
Forster tern																								
Common tern																								
Arctic tern																tv	unc							
Roseate tern																								
Least tern																					8 Sept. '99			
Sooty tern																av								
Black tern	tv				8 Sept. '83																			
Black skimmer																tv	unc	May 1, 12	May 20, 30	Aug. 20, Sept. 6	Sept. 13, 25			
Cory shearwater																								
Greater shearwater																								
Audubon shearwater																								
Sooty shearwater																								
Black-capped petrel																								
Sealed petrel									wv					28 Aug. '93										
Leach petrel							av	once 5 Ap '80																
Wilson petrel																					Nov. '82			
Yellow-billed tropic-bird																av								
Booby																								
Gannet																								
Cormorant																								
Double-crested cormorant																								
American white pelican																tv	oc	17 May '97		Nov.				
Brown pelican																								
Man-o'-war bird																								
American merganser	tv, sr	ab, unc	Feb., Mar. 5, Apr. 16		Nov. 3	yes	tv	rare	tv, wv	c, oc		June	Nov.			tv	fc		Apr., May	Nov.			tv	rare
Red-breasted merganser	tv	c					tv		wv	c		Apr. 1	Nov. 20			tv, wv	ab, fc	Mar. 28, Apr. 5	May 10, 30	Oct. 1	Dec.		wv	unc
Hooded merganser	tv, sr	fc, unc	Apr. 2				tv		tv, wv	oc, rare		Feb. 11				tv	fc	Mar. 24, Apr. 2			Dec.		tv	unc
Mallard	tv	rare					tv, sr	unc, rare	tv	fc						tv, res	fc, oc	Mar. 20, Apr. 2	Apr. 15, May 10	Oct. 13, 21				
Black duck	tv, res	c, unc	Mar. 13, Apr. 5, 16				tv	fc	tv, wv	c, oc	Apr. 4		Sept. 15			tv, res	c, oc	Mar. 23, 30	Apr. 20, May 5	Sept 1, 15, Oct. 1	Nov.	yes	tv	unc
Gadwall						yes																		
Widgeon																tv	rare							
Baldpate	tv	rare																						
European teal							tv									tv	fc	Mar. 21, 30	Apr. 15, 30	Sept. 1, 15, Oct 6	Oct. 15		tv	
Green-winged teal	tv	fc																						
Blue-winged teal	tv	fc		Oct.	Nov., Dec.		tv		tv	c	Apr. 12		Sept. 1	Oct. 20		tv	fc	Mar. 20, Apr. 5		Sept. 16	Oct 30			
Cinnamon teal							tv		tv	c	Apr. 15	June 5	Sept. 1	Oct. 20		tv, sr	c, oc	Apr. 20		Sept. 1	Oct 10	yes	tv	
Shoveler																								
Pintail	tv	rare														tv	unc	Apr. 1	May 5	Sept. 15, 30	Oct 15, 30			
Wood duck	sr	fc	Mar., Apr. 1, 15		Oct. 13	yes	tv		tv	unc			Sept. 20			tv	fc	Feb. 25, Mar. 20	Apr. 8, 20	Sept. 15, 30	Oct. 25, 25			
Rufous-crested duck							sr	rare	sr	rare					yes	sr, tv	unc, fc	Mar. 28, Apr. 11		Oct.	yes	sr	rare
Redhead																								
Canvasback									tv	fc						tv	fc			Oct 8, 16	Nov. 10			
American scaup duck	tv	rare					tv	rare	tv							tv, wv	unc		Apr.	Nov. 9				
Lesser scaup duck	tv	fc					tv		tv	c						tv, wv	c, unc		Apr.	Oct 10	Nov. 30		tv	
Ring-necked duck							tv		tv	c						tv	c	Mar. 20, Apr. 1	May 30	Oct 6, 15	Dec 10			
American golden-eye	tv	fc							tv, wv	fc, oc						tv	unc	Mar.		Oct.			wv	
Barrow golden-eye				Apr.					tv, wv	c, unc			Nov. 3			tv, wv	c, unc	Mar. 10, 20	Apr. 10, 30	Nov. 1, 25				
Buffle-head	tv		Apr.				tv													Oct 15, 30	Nov.		tv	
Old squaw	tv	fc	Apr. 14				tv		tv	fc						tv	fc	Mar. 20, Apr. 10	May 10, 25	Oct.			tv	
Harlequin duck							tv									wv	c		May					
Labrador duck																								
American eider																								
King eider																wv	rare		Feb. 9	22 Dec. '05				
American scoter	tv	fc							wv	rare						wv	oc							
White-winged scoter	tv	fc		Sept. 27					tv	rare						tv	oc	May	June 10	Oct. 20, Sept 15	Dec.			
Surf scoter	tv								tv	unc						tv	c			Oct.			tv	
Ruddy duck																tv	fc		May 10	Oct. 10, 20	Nov.			
Lesser snow goose							tv		tv	fc						tv, sr	fc, rare	Mar.						
Greater snow goose																								
Blue goose																								
Am. white-fronted goose																								
Canada goose	tv	c	Apr. 18																					
Hutchins goose					Oct. 8, Nov. 14											tv, wv	c, oc	Feb. 22, Mar. 15	Apr. 15, May 9	Oct. 6, 21	Nov.			
White-bellied brant							tv	unc	tv	c														
Black brant																								
Barnacle goose									tv	rare						av	once							
Whistling swan	tv	rare	Mar. 26						tv	rare			30 Oct. '91							3 Nov. '05				
Trumpeter swan																		Mar. 27, Apr. 2						
White ibis							tv	rare								tv	oc							
Glossy ibis																av	once							
White-faced glossy ibis																av	once							

SPECIES RECORDED	NEW YORK		NIAGARA								
	Resident or transient	Common or rare	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Breeds	Resident or transient	Common or rare	Arrives from south
Holboell grebe	wv	oc	tv	unc		May 8	Oct.		tv	rare	
Horned grebe	wv	fc	tv, res	c, oc				once	tv	fc	
Pied-billed grebe	tv, res	c, oc	sr	fc				yes	tv, sr	fc, unc	Apr. 13
Loon	wv, tv	oc, fc	tv	fc				formerly	tv, sr	c	Apr.
Black-throated loon											
Red-throated loon	wv	rare	tv	oc		May	Dec.		tv	oc	
Puffin											
Black guillemot											
Brünnich murre	wv	rare	wv	oc					wv	oc	
Razor-billed auk											
Dovekie											
Skua											
Pomarine jæger	wv	oc									
Parasitic jæger	wv	unc	tv	rare			Sept. '87		tv	rare	
Long-tailed jæger											
Ivory gull											
Kittiwake	wv		tv	oc					wv	rare	
Glaucous gull	wv	rare									
Iceland gull											
Kümlien gull											
Great black-backed gull	wv	unc	wv	oc			Feb. 1		wv	rare	Feb. '93
Herring gull	wv	ab	tv, wv	ab, c					tv, sr, wv	c, oc	Mar. 29,
Ring-billed gull	wv	fc	tv	unc					tv	rare	
Laughing gull	sr	unc	tv	rare							
Bonaparte gull	tv, wv	fc, oc	tv	c	Apr.				tv	c	
Little gull											
Sabine gull											
Gull-billed tern											
Caspian tern	tv	rare	tv	oc							
Royal tern											
Cabot tern											
Trudeau tern											
Forster tern	tv	oc									
Common tern	sr, tv	c	tv	fc					tv	oc	
Arctic tern	tv	rare									
Roseate tern	tv	rare	av		31 May '86						
Least tern	tv	unc	tv	rare					av		
Sooty tern											
Black tern	tv	unc	tv	unc			Sept. 5, 12		tv	unc	Apr.
Black skimmer									av	once	
Cory shearwater											
Greater shearwater											
Audubon shearwater											
Sooty shearwater											
Black-capped petrel									av	once	28 Aug.
Scaled petrel											
Leach petrel	tv	oc									
Wilson petrel			av				Oct. '75				
Yellow-billed tropic-bird											
Booby											
Gannet	wv	unc									
Cormorant	tv	rare							av	twice	
Double-crested cormorant	tv	fc	tv	rare							
American white pelican											
Brown pelican											
Man-o'-war bird											
American merganser	wv	unc	wv	c		Mar. 26			tv	fc	Mar. 25
Red-breasted merganser	tv	c	tv, wv	ab, fc					tv, sr	c	
Hooded merganser	tv	unc	tv	fc					tv	fc	
Mallard	tv	unc	tv	c					tv	fc	
Black duck	wv	c	tv	c		Apr. 22			tv, sr	c, rare	Mar. 22
Gadwall	tv	rare	tv	unc					tv	rare	Apr.
Widgeon											
Baldpate	tv	irreg	tv	c	Apr. 19, May 5				tv	fc	
European teal											
Green-winged teal	tv	unc	tv	c					tv	c	
Blue-winged teal	tv	fc	tv	c	Apr. 22				tv	c	
Cinnamon teal											
Shoveler	tv	rare	tv	fc			Oct.		tv	rare	
Pintail	tv	c	tv	c	Mar. 26				tv	c	
Wood duck	tv, sr	unc, rare	sr	unc				yes	tv, sr	c, unc	
Rufous-crested duck											
Redhead	tv	unc	tv	c	Mar. 26	Apr. 14			tv	unc	
Canvasback	tv	rare	tv	irreg	Apr. 22				tv	rare	
American scaup duck	tv	c	tv	c					tv	c	
Lesser scaup duck	tv	fc	tv	c					tv	c	
Ring-necked duck	tv	rare									
American golden-eye	wv	fc, Oct. 16	wv	c					tv	c	
Barrow golden-eye											
Buffle-head	wv	fc	tv	c					tv	c	Apr. 6
Old squaw	wv	c	wv	c		Mar. 17, Apr. 22			tv	unc	
Harlequin duck	w										
Labrador duck											
American eider											
King eider									wv	rare	
American scoter	wv	fc	tv	unc		Apr. 3			tv	oc	
White-winged scoter	wv	c	tv	c					tv	c	
Surf scoter	wv	c	tv	c					tv	unc	
Ruddy duck	tv	fc	tv	c					tv	fc	
Lesser snow goose											
Greater snow goose	tv	rare									
Blue goose											
Am. white-fronted goose											
Canada goose	tv	c	tv	c	Mar. 5				tv	c	
Hutchins goose	tv	rare									
White-bellied brant	tv	c	av								
Black brant									av		
Barnacle goose											
Whistling swan			tv	unc	Mar. 30	Apr. 5			av		13 Mar.
Trumpeter swan											
White ibis											
Glossy ibis											
White-faced glossy ibis											

			ONONDAGA							ONTARIO		
ns h	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south
			tv	fc						tv, wv	unc, oc	Apr. 23, 29
			tv	fc						tv, wv	c, rare	Mar. 20, Apr. 1, 14
			tv, sr	c, fc					yes	tv, sr	c, rare	Mar. 15, Apr. 12
	Oct.	yes	tv	fc						tv, wv	c	Apr. 1, 8, 15
			tv	rare						tv	oc	Apr. 20
	13 Dec. '95, 24 Dec. '94		wv	oc						wv	oc	
	22 Aug. '86											
		yes	tv	c						wv	rare	
			tv	oc						tv, wv	c, fc	Mar. 15, 20, 30
										tv, wv	unc, oc	
			tv	c						tv	c	Apr. 10, 16, 22
										tv	rare	28 Apr. '95
			tv	oc						tv	fc	May 5, 21
	Sept. 12, 1893		tv	rare						tv	fc	Apr. 28, May 12
90.	15 Nov. '77		tv	rare			Nov. '83					
			tv	rare				Nov. 30		tv	rare	
			av				1893			av	once	10 May '92
			tv	fc		Apr. 6				wv	fc	
		yes	tv	c						tv, wv	c, unc	Apr. 1
			tv	c		Apr. 6				tv	fc	Mar. 20, 25
			tv	fc	Mar. 22					tv, res	fc, rare	Mar. 15, 30
		yes	tv	ab						tv, wv, sr	c, fc, rare	
	Oct.									tv	rare	Apr.
			tv	fc						tv	fc	Mar. 20, 30
			tv	fc						tv	fc	Mar. 20, Apr. 5
			tv	c			Aug. 3, 11			tv, sr	fc, rare	Apr. 5, 15
			tv	rare			Aug. 14			tv	unc	Apr. 5, 12
			tv	fc						tv	c	Mar. 10, 25
			sr	unc	Apr. 9, 23					tv, sr	fc, unc	Mar. 20, 30
			tv	c						tv	c	Mar. 10, 25
			tv	unc						wv	irreg	
			tv	ab						tv, wv	c, unc	Mar. 16, 31
			tv	c						tv, wv	c, rare	Mar. 15, 30, Apr. 15
			tv	oc	10 Mar. '00					tv	rare	
			tv	fc	Apr. 6					wv	c	
			tv	ab	Mar. 12					tv, wv	c, rare	Mar. 22, Apr. 12
			tv	c						tv, wv	fc, oc	
			av				20 Jan. '77					
			tv	c						tv	rare	
			tv	unc			Nov. 27			tv	fc	Mar. 3, Apr. 20, May 15
										tv	fc, fall	
			tv	c			Oct. 23			tv	fc	Mar. 20, Apr. 1
			tv	fc						tv, wv	c, oc	Feb. 24, Mar. 18, 20
			av					13 Sept. '97				
'91.										tv	rare	
										tv	oc	25 Mar. '05

SPECIES RECORDED	NEW YORK		NIAGARA						ONEIDA						ONONDAGA							ONTARIO		
	Resident or transient	Common or rare	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Breeds	Resident or transient	Common or rare	Arrives from south	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south
Holboell grebe	wv	oc	tv	unc		May 8	Oct		tv	rare					tv	fc						tv, wv	unc, oc	Apr. 23, 29
Horned grebe	wv	fc	tv, res	c, oc				once	tv	fc					tv	fc						tv, wv	c, rare	Mar. 20, Apr. 1, 14
Pied-billed grebe	tv, res	c, oc	sr	fc				yes	tv, sr	fc, unc	Apr. 13				tv, sr	c, fc					yes	tv, sr	c, rare	Mar. 15, Apr. 12
Loon	wv, tv	oc, fc	tv	fc				formerly	tv, sr	c	Apr.		Oct.	yes	tv	fc						tv, wv	c	Apr. 1, 8, 15
Black-throated loon																								
Red-throated loon	wv	rare	tv	oc		May	Dec		tv	oc					tv	rare						tv	oc	Apr. 20
Puffin																								
Black guillemot																								
Brünnich murre	wv	rare	wv	oc					wv	oc			13 Dec. '95, 24 Dec. '94		wv	oc						wv	oc	
Razor-billed auk																								
Dovekie																								
Skua																								
Pomarine jæger	wv	oc																						
Parasitic jæger	wv	unc	tv	rare			Sept. '87		tv	rare			22 Aug. '86											
Long-tailed jæger																								
Ivory gull																								
Kittiwake	wv		tv	oc					wv	rare														
Glaucous gull	wv	rare																						
Iceland gull																								
Kumlien gull																								
Great black-backed gull	wv	unc	wv	oc			Feb. 1		wv	rare	Feb. '93											wv	rare	
Herring gull	wv	ab	tv, wv	ab, c					tv, sr, wv	c, oc	Mar. 29, Apr. 5			yes	tv	c						tv, wv	c, fc	Mar. 15, 20, 30
Ring-billed gull	wv	fc	tv	unc					tv	rare					tv	oc						tv, wv	unc, oc	
Laughing gull	sr	unc	tv	rare																				
Bonaparte gull	tv, wv	fc, oc	tv	c	Apr.				tv	c					tv	c						tv	c	Apr. 10, 16, 22
Little gull																								
Sabine gull																								
Gull-billed tern																								
Caspian tern	tv	rare	tv	oc																		tv	rare	28 Apr. '95
Royal tern																								
Cabot tern																								
Trudeau tern																								
Forster tern	tv	oc																						
Common tern	tv	c	tv	fc					tv	oc					tv	oc						tv	fc	May 5, 21
Arctic tern	tv	rare																						
Roseate tern	tv	rare	av		31 May '86																			
Least tern	tv	unc	tv	rare					av															
Sooty tern																								
Black tern	tv	unc	tv	unc			Sept. 5, 12		tv	unc	Apr.		Sept. 12		tv	rare						tv	fc	Apr. 28, May 12
Black skimmer									av	once			1893											
Cory shearwater																								
Greater shearwater																								
Audubon shearwater																								
Sooty shearwater																								
Black-capped petrel									av	once	28 Aug. '93													
Scaled petrel																								
Leach petrel	tv	oc																						
Wilson petrel			av				Oct. '75																	
Yellow-billed tropic-bird																								
Booby																								
Gannet	wv	unc																						
Cormorant	tv	rare							av	twice		13 Oct. '90	15 Nov. '77		tv	rare			Nov. '83					
Double-crested cormorant	tv	fc	tv	rare											tv	rare				Nov. 30		tv	rare	
American white pelican															av				1893			av	once	10 May '92
Brown pelican																								
Man-o'-war bird																								
American merganser	wv	unc	wv	c		Mar. 26			tv	fc	Mar. 25				tv	fc		Apr. 6				wv	fc	
Red-breasted merganser	tv	c	tv, wv	ab, fc					tv, sr	c				yes	tv	c						tv, wv	c, unc	Apr. 1
Hooded merganser	tv	unc	tv	fc					tv	fc					tv	c		Apr. 6				tv	fc	Mar. 20, 25
Mallard	tv	unc	tv	c					tv	fc					tv	c						tv, res	fc, rare	Mar. 15, 30
Black duck	wv	c	tv	c		Apr. 22			tv, sr	c, rare	Mar. 22				tv	fc	Mar. 22					tv, wv, sr	c, fc, rare	
Gadwall	tv	rare	tv	unc					tv	rare	Apr.		Oct.	yes	tv	ab						tv	rare	Apr.
Widgeon																								
Baldpate	tv	irreg	tv	c	Apr. 19, May 5				tv	fc												tv	fc	Mar. 20, 30
European teal															tv	fc								
Green-winged teal	tv	unc	tv	c					tv	c					tv	fc						tv	fc	Mar. 20, Apr. 5
Blue-winged teal	tv	fc	tv	c	Apr. 22				tv	c					tv	c			Aug. 3, 11			tv, sr	fc, rare	Apr. 5, 15
Cinnamon teal																								
Shoveler	tv	rare	tv	fc			Oct.		tv	rare					tv	rare			Aug. 14			tv	unc	Apr. 5, 12
Pintail	tv	c	tv	c	Mar. 26				tv	c					tv	fc						tv	c	Mar. 10, 25
Wood duck	tv, sr	unc, rare	sr	unc				yes	tv, sr	c, unc					sr	unc	Apr. 9, 23					tv, sr	fc, unc	Mar. 20, 30
Rufous-crested duck																								
Redhead	tv	unc	tv	c	Mar. 26	Apr. 14			tv	unc												tv	c	Mar. 10, 25
Canvasback	tv	rare	tv	irreg	Apr. 22				tv	rare					tv	c						wv	irreg	
American scaup duck	tv		tv	c					tv	c					tv	unc						tv, wv	c, unc	Mar. 16, 31
Lesser scaup duck	tv	fc	tv	c					tv	c					tv	ab						tv, wv	c, rare	Mar. 15, 30, Apr. 15
Ring-necked duck	tv	rare													tv	c						tv	rare	
American golden-eye	wv	fc, Oct. 26	wv	c					tv	c					tv	oc	10 Mar. '00					wv	c	
Barrow golden-eye															tv	fc	Apr. 6							
Bufflehead	wv	fc	tv	c					tv	c	Apr. 6											tv, wv	c, rare	Mar. 22, Apr. 12
Old squaw	wv	c	wv	c		Mar. 17, Apr. 22			tv	unc					tv	ab	Mar. 12					tv, wv	fc, oc	
Harlequin duck	w														tv	c								
Labrador duck																								
American eider																								
King eider																								
American scoter	wv	fc	tv	unc		Apr. 3			wv	rare									20 Jan. '77			tv	rare	
White-winged scoter	wv	c	tv	c					tv	oc					av							tv	fc	Mar. 3, Apr. 20, May 15
Surf scoter	wv	c	tv	c					tv	c					tv	c			Nov. 27			tv	fc, fall	
Ruddy duck	tv	fc	tv	c					tv	unc					tv	unc						tv	fc	Mar. 20, Apr. 1
Lesser snow goose									tv	fc									Oct. 23					
Greater snow goose	tv	rare													tv	c								
Blue goose																								
American white fronted goose																								
Canada goose	tv	c	tv	c	Mar. 5																	tv, wv	c, oc	Feb. 24, Mar. 18, 20
Hutchins goose	tv	rare							tv	c														
White bellied brant	tv	c	av												tv	fc				13 Sept. '07		tv	rare	
Black brant												30 Oct. '01			av									
Barnacle goose									av															
Whistling swan			tv	unc	Mar. 30	Apr. 5																tv	oc	25 Mar. '05
Trumpeter swan									av		13 Mar. '90													
White ibis																								
Glossy ibis																								
White-faced glossy ibis																								

SPECIES RECORDED	ONTARIO (*continued*)				ORANGE				
	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Returns from north	Departs for south	Bree
Holboell grebe	May 12	Oct. 7, 20	Nov. 27		tv, wv	irreg			
Horned grebe	May 5, 12	Sept. 13, 20	Nov. 18, 30		tv, wv	c, oc			
Pied-billed grebe	May 10, 12	Aug. 27	Nov. 1, 15	yes	tv, sr	fc, oc			
Loon	May 14, 30	Sept. 17, 27	Nov. 7, 20		tv	fc			
Black-throated loon									
Red-throated loon	May 10, 20	Oct. 22			tv	oc			
Puffin									
Black guillemot									
Brünnich murre		Dec. 20							
Razor-billed auk									
Dovekie									
Skua									
Pomarine jæger									
Parasitic jæger									
Long-tailed jæger									
Ivory gull									
Kittiwake									
Glaucous gull									
Iceland gull									
Kumlien gull									
Great black-backed gull									
Herring gull	May 5, 12, 16	Aug. 12, 30, Sept. 5	Nov		tv, wv	c, fc			
Ring-billed gull	Apr. 22, 30	Oct. 14, 20	Nov. 7		wv	oc			
Laughing gull					av				
Bonaparte gull	May 20	Oct. 10	Nov. 4, 12, 28		tv	c, fall			
Little gull									
Sabine gull									
Gull-billed tern									
Caspian tern	5 May '06								
Royal tern									
Cabot tern									
Trudeau tern									
Forster tern									
Common tern	June 10	Aug. 12, 18	Oct. 8		tv	rare			
Arctic tern									
Roseate tern									
Least tern									
Sooty tern					av			Sept. 13, 14, 18	
Black tern	June 1, 15	Aug. 10, Sept. 6	Sept. 8, 20		tv	oc			
Black skimmer									
Cory shearwater									
Greater shearwater									
Audubon shearwater									
Sooty shearwater									
Black-capped petrel									
Scaled petrel									
Leach petrel									
Wilson petrel									
Yellow-billed tropic-bird									
Booby									
Gannet									
Cormorant									
Double-crested cormorant		7 Nov. '99			tv	rare	Oct. 10	Nov. 4	
American white pelican									
Brown pelican									
Man-o'-war bird									
American merganser	Apr. 20, 30, May 12	Oct. 20, 28			wv	c			
Red-breasted merganser	May 18, 30	Oct. 7, 12			tv, wv	c			
Hooded merganser	May 5, 15	Oct. 1, 12	Nov. 20	1880	tv, sr	fc, rare			yes
Mallard	Apr. 20, May 10	Oct. 1, 19	Nov. 4, 20		tv				
Black duck	Apr. 20, May 10	Aug. 30, Sept. 25		yes	tv, res	fc, rare			yes
Gadwall		Oct.			tv	rare			
Widgeon									
Baldpate	May 10, 25	Oct. 10	Nov. 10, 20		tv	unc			
European teal									
Green-winged teal	Apr. 20	Oct. 1, 15	Nov. 15		tv	c			
Blue-winged teal			Oct.	yes	tv	c			
Cinnamon teal									
Shoveler	Apr. 20, May 12	Oct.	Nov		tv				
Pintail	May 1, 12	Sept. 25, Oct. 7	Nov. 12, 15		tv	unc			
Wood duck			Nov. 1, 15	Apr. 15, May 10	sr	unc			yes
Rufous-crested duck									
Redhead	Apr. 30	Sept. 20, 30	Nov. 25		tv	irreg			
Canvasback	Apr. 10, 20, May 12	Oct. 22, Nov. 10			tv	irreg			
American scaup duck	May 1, 10	Oct. 16, 22	Dec. 3		tv, wv	c			
Lesser scaup duck	May 20, 30	Oct. 1, 16	Nov. 20		tv	c			
Ring-necked duck					tv	rare			
American golden-eye	Apr. 25, May 24, 31	Oct. 16, 30			tv, wv	ab			
Barrow golden-eye									
Buffle-head	May 1, 20	Oct. 10, 16	Nov. 1, 25		tv	c	Sept. 8		
Old squaw	May 1, 15	Oct. 16, Nov. 4			tv	c			
Harlequin duck									
Labrador duck									
American eider									
King eider									
American scoter		Oct.			tv	c			
White-winged scoter	May 30, June 10	Oct. 9, 14	Nov. 20		tv	c			
Surf scoter		Oct. 1, 14	Nov. 10		tv	c			
Ruddy duck	Apr. 20, 30, May 12	Sept. 25, Oct. 10	Nov. 10		tv	c			
Lesser snow goose									
Greater snow goose					tv	rare			
Blue goose									
Am. white-fronted goose									
Canada goose	May 1, 8	Oct. 6, 13	Nov. 30						
Hutchins goose									
White-bellied brant		Oct. 17							
Black brant									
Barnacle goose									
Whistling swan	Apr. '98	Nov			av			21 Oct. '80	
Trumpeter swan									
White ibis									
Glossy ibis									
White-faced glossy ibis									

ORLEANS							OSWEGO						
nt	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds
rare		May 1					tv, wv	fc, oc					
c		Apr. 25	May 12				tv, wv	c, oc					
unc						June, July	tv, sr	c, oc					yes
fc, rare		Mar	May 6			yes	tv, wv	fc, rare		June 10			
unc		Apr. 28	May 30, June 21				wv	oc					
rare			Mar. 12	Nov. 20			wv	oc				22 Jan. '95	
rare			10 Apr. '81				wv	rare			9 Mar. '90		
							wv	rare					
							wv	rare			28 Dec. '89		
rare							wv	rare					
c, fc							tv, wv	c, fc					
fc							tv	fc					
(?)							av						
fc		Apr.	May				tv	fc					
rare				1 Sept. '90			tv	rare					
unc							tv	oc					
rare					8 Sept. '99								
							av		about 1875				
unc		May 1	May 27, July 30				sr	local	May 5, 12			Sept. 1, 10	May 30, June 20
once					Nov. '82								
		19 Sept. '76											
rare							tv	rare					
fc			Mar. 26				tv, wv	c, fc					
ab			May 20	Nov. 9, 16			tv, wv	c, unc		Mar. 28, Apr. 2	Jan. 17		yes
fc							tv, sr	fc, unc					young, June
fc, unc				Sept. 1		May 10	tv, sr	fc, oc				Nov. 10	yes
c, unc						yes	tv, sr	c, fc		Mar. 23, Apr. 6			yes
unc							tv	unc					
fc							tv	fc					
c, oc						yes	tv, sr	c, unc			Sept. 29		yes
unc							tv	oc					
unc		Mar. 28, Apr. 4				yes	tv	fc	Feb. 17				
fc, unc						yes	sr	unc	Mar. 31, Apr. 6				yes
unc							tv	fc					
oc					Jan. 10		tv	oc					
fc							wv	c					
fc							wv	c					
rare													
fc							tv, wv	c			Feb. 17		
c, unc		Apr. 12					tv, wv	c, unc					
fc							wv	c					
fc							wv	fc					
c							tv	fc					
							tv	c					
fc							tv	fc					
							tv						
c							tv	c	Feb. 24, Mar. 10, 25				
rare													
rare							av						
rare		Apr. 9					av						
		May '89											

SPECIES RECORDED	ONTARIO (*continued*)				ORANGE					ORLEANS							OSWEGO						
	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds
Holboell grebe	May 12	Oct. 7, 20	Nov. 27		tv, wv	irreg				tv	rare	May 1					tv, wv	fc, oc					
Horned grebe	May 5, 12	Sept. 13, 20	Nov. 18, 30		tv, wv	c, oc				tv	c	Apr. 25	May 12				tv, wv	c, oc					
Pied-billed grebe	May 10, 12	Aug. 27	Nov. 1, 15	yes	tv, sr	fc, oc				sr	unc					June, July	tv, sr	c, oc					yes
Loon	May 14, 30	Sept. 17, 27	Nov. 7, 20		tv	fc				tv, sr	fc, rare	Mar.	May 6			yes	tv, wv	fc, rare		June 10			
Black-throated loon																							
Red-throated loon	May 10, 20	Oct. 22			tv	oc				tv	unc	Apr. 28	May 30, June 21				wv	oc					
Puffin																							
Black guillemot																							
Brunnich murre		Dec. 20								wv	rare		Mar. 12	Nov. 20			wv	oc				22 Jan. '95	
Razor-billed auk																							
Dovekie																							
Skua																							
Pomarine jæger																							
Parasitic jæger																							
Long-tailed jæger																							
Ivory gull																							
Kittiwake										wv	rare		10 Apr. '81				wv	rare			9 Mar. '90		
Glaucous gull																	wv	rare					
Iceland gull																	wv	rare			28 Dec '89		
Kumlien gull																							
Great black-backed gull										wv	rare						wv	rare					
Herring gull	May 5, 12, 16	Aug. 12, 30, Sept. 5	Nov		tv, wv	c, fc				tv, wv	c, fc						tv, wv	c, fc					
Ring-billed gull	Apr. 22, 30	Oct. 14, 20	Nov. 7		wv	oc				tv	fc						tv	fc					
Laughing gull					av					av	(?)						av						
Bonaparte gull	May 20	Oct. 10	Nov. 4, 12, 28		tv	c, fall				tv	fc	Apr.	May				tv	fc					
Little gull																							
Sabine gull																							
Gull-billed tern																							
Caspian tern	5 May '06									tv	rare			1 Sept. '90			tv	rare					
Royal tern																							
Cabot tern																							
Trudeau tern																							
Forster tern																							
Common tern	June 10	Aug. 12, 18	Oct. 8		tv	rare				tv	unc						tv	oc					
Arctic tern																							
Roseate tern																							
Least tern										tv	rare												
Sooty tern					av			Sept. 13, 14, 18							8 Sept. '99		av		about 1875				
Black tern	June 1, 15	Aug. 10, Sept. 6	Sept. 8, 20		tv	oc				tv	unc	May 1	May 27, July 30				sr	local	May 5, 12			Sept. 1, 10	May 30, June 20
Black skimmer																							
Cory shearwater																							
Greater shearwater																							
Audubon shearwater																							
Sooty shearwater																							
Black-capped petrel																							
Scaled petrel																							
Leach petrel																							
Wilson petrel										av	once												
Yellow-billed tropic-bird										av		19 Sept. '76			Nov. '82								
Booby																							
Gannet																							
Cormorant																							
Double-crested cormorant		7 Nov. '99			tv	rare	Oct. 10	Nov. 4		tv	rare						tv	rare					
American white pelican																							
Brown pelican																							
Man-o'-war bird																							
American merganser	Apr. 20, 30, May 12	Oct. 20, 28			wv	c				tv	fc												
Red-breasted merganser	May 18, 30	Oct. 7, 12								tv	ab		Mar. 26				tv, wv	c, fc		Mar. 28, Apr. 2	Jan. 17		yes
Hooded merganser	May 5, 15	Oct. 1, 12	Nov. 20	1880	tv, wv	c				tv	fc		May 20	Nov. 9, 16			tv, wv	c, unc					young, June
Mallard	Apr. 20, May 10	Oct. 1, 10	Nov. 4, 20		tv, sr	fc, rare			yes	tv, sr	fc, unc						tv, sr	fc, unc				Nov. 10	yes
Black duck	Apr. 20, May 10	Aug. 30, Sept. 25		yes	tv					tv, sr	c, unc			Sept. 1		May 10	tv, sr	fc, oc		Mar. 23, Apr. 6			yes
Gadwall		Oct.			tv, res	fc, rare			yes							yes	tv, sr	c, fc					
Widgeon					tv	rare																	
Baldpate	May 10, 25	Oct. 10	Nov. 10, 20							tv	unc												
European teal					tv	unc											tv	unc					
Green-winged teal	Apr. 20	Oct. 1, 15	Nov. 15							tv	fc												
Blue-winged teal			Oct.	yes	tv	c				tv, sr	c, oc						tv	fc			Sept. 29		yes
Cinnamon teal					tv	c										yes	tv, sr	c, unc					
Shoveler	Apr. 20, May 12	Oct.	Nov							tv	unc												
Pintail	May 1, 12	Sept. 25, Oct. 7	Nov 12, 15		tv					tv, sr	unc						tv	oc					
Wood duck			Nov. 1, 15	Apr. 15, May 10	tv	unc				tv, sr	fc, unc	Mar. 28, Apr. 4				yes	tv	fc	Feb. 17				yes
Rufous-crested duck					sr	unc			yes							yes	sr	unc	Mar. 31, Apr. 6				
Redhead	Apr. 30	Sept. 20, 30	Nov. 25		tv	irreg				tv	unc												
Canvasback	Apr. 20, 30, May 12	Oct. 22, Nov. 10			tv	irreg				tv, wv	oc						tv	fc					
American scaup duck	May 1, 10	Oct. 16, 22	Dec. 3		tv	fc				tv	fc				Jan. 10		tv	oc					
Lesser scaup duck	May 20, 30	Oct. 1, 16	Nov. 20		tv, wv	c				tv	fc						wv	c					
Ring-necked duck					tv	c				tv	rare						wv	c					
American golden-eye	Apr. 25, May 24, 31	Oct. 16, 30			tv	rare				wv	fc										Feb. 17		
Barrow golden-eye					tv, wv	ab											tv, wv	c					
Buffle-head	May 1, 20	Oct. 10, 16	Nov. 1, 25							tv, wv	c, unc	Apr. 12					tv, wv	c, unc					
Old squaw	May 1, 15	Oct. 16, Nov. 4			tv	c	Sept 8			tv, wv	fc						wv	c					
Harlequin duck					tv	c																	
Labrador duck																							
American eider																							
King eider																							
American scoter		Oct.								tv	fc						wv	fc					
White-winged scoter	May 30, June 10	Oct. 9, 14	Nov. 20		tv	c				tv	c						tv	fc					
Surf scoter		Oct. 1, 14	Nov. 10		tv	c				tv							tv	c					
Ruddy duck	Apr. 20, 30, May 12	Sept. 25, Oct. 10	Nov. 10		tv	c				tv	fc						tv	fc					
Lesser snow goose					tv	c											tv						
Greater snow goose																							
Blue goose																							
Am. white-fronted goose					tv	rare																	
Canada goose	May 1, 8	Oct. 6, 13	Nov. 30							tv	c								Feb. 24, Mar. 10, 25				
Hutchins goose										tv	rare						tv	c					
White-bellied brant		Oct. 17								tv	rare												
Black brant																	av						
Barnacle goose																							
Whistling swan	Apr. '98	Nov			av			21 Oct. '80		tv	rare	Apr. 9					av						
Trumpeter swan																							
White ibis										av		May '89											
Glossy ibis																							
White-faced glossy ibis																							

SPECIES RECORDED	OTSEGO			PUTNAM			RENSSELAER					
	Resident or transient	Common or rare	Leaves for north	Resident or transient	Common or rare	Arrives from south	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	De s
Holboell grebe							tv	unc			Oct 12, 16, 20	
Horned grebe	tv			tv	unc	Apr. 8	tv		Apr. 7		Oct. 10	
Pied-billed grebe	tv			tv	c	Apr. 10	tv	c	Apr.		Sept	Nov
Loon	tv			tv	fc	Apr. 4, 13	tv	c	Apr. 5		Oct.	Nov
Black-throated loon							av	?				
Red-throated loon	wv	rare					tv	rare			Sept. 21, 29	
Puffin												
Black guillemot												
Brünnich murre				av	once, Dec. '95		av				5 Dec. '01	12 D
Razor-billed auk												
Dovekie												
Skua												
Pomarine jæger												
Parasitic jæger												
Long-tailed jæger												
Ivory gull												
Kittiwake	wv	rare										
Glaucous gull												
Iceland gull							av				21 Nov. '88	
Kümlien gull							av					
Great black-backed gull							wv	rare				
Herring gull	tv	fc		tv	c		tv	fc				
Ring-billed gull												
Laughing gull												
Bonaparte gull	tv	unc		tv	unc		tv	fc				
Little gull												
Sabine gull												
Gull-billed tern												
Caspian tern												
Royal tern												
Cabot tern												
Trudeau tern												
Forster tern												
Common tern	tv	rare		tv	unc		tv	oc				
Arctic tern												
Roseate tern												
Least tern												
Sooty tern												
Black tern				tv	rare	9 Apr. '96	tv	rare				
Black skimmer												
Cory shearwater												
Greater shearwater												
Audubon shearwater												
Sooty shearwater												
Black-capped petrel												
Scaled petrel												
Leach petrel							av				Oct. (?) '79	13 N
Wilson petrel												
Yellow-billed tropic-bird												
Booby												
Gannet												
Cormorant												
Double-crested cormorant							tv	rare			21 Sept. '88	13 N
American white pelican												
Brown pelican												
Man-o'-war bird												
American merganser	tv	unc	Mar. 26, 30	tv	c	Mar. 25	tv	fc		Mar. 3	Jan. 2, 21	
Red-breasted merganser	tv	fc	Mar. 23, 25	tv	c		tv	fc				
Hooded merganser	tv	oc		tv	unc	Mar. 20	tv	fc				
Mallard	tv	unc		tv	fc		tv	fc				
Black duck	tv	fc		tv	c	Mar. 18	tv	c	Mar. 16, Apr. 9	Apr. 12	Feb. 21	
Gadwall							tv	oc				
Widgeon												
Baldpate							tv					
European teal												
Green-winged teal	tv	unc		tv			tv	c				
Blue-winged teal	tv	unc		tv			tv	c				
Cinnamon teal												
Shoveler							tv	oc				
Pintail	tv	unc		tv			tv	unc				
Wood duck	sr	unc		sr, breeds	unc	Apr. 1	tv, sr	fc, rare				
Rufous-crested duck												
Redhead							tv	rare				
Canvasback							tv	rare				
American scaup duck							tv	fc				
Lesser scaup duck							tv	fc				
Ring-necked duck												
American golden-eye	tv	fc		tv	c		wv					
Barrow golden-eye												
Buffle-head	tv	oc		tv	c		tv	c				
Old squaw				wv	fc		tv	c				
Harlequin duck												
Labrador duck												
American eider												
King eider												
American scoter							tv	oc			Sept. 29	
White-winged scoter							tv	oc				
Surf scoter							tv	oc				
Ruddy duck				tv	unc		tv	oc				Nov
Lesser snow goose												
Greater snow goose												
Blue goose	tv	rare, 23 Mar. '98										
Am. white-fronted goose												
Canada goose	tv, wv	fc, oc		tv	c	Mar	tv	c				
Hutchins goose							av	once				
White-bellied brant							tv	oc				
Black brant												
Barnacle goose												
Whistling swan							av					
Trumpeter swan												
White ibis												
Glossy ibis												
White-faced glossy ibis												

RICHMOND		ROCKLAND		ST LAWRENCE		SARATOGA				SCHENECTADY
sident or nsient	Common or rare	Resident or transient	Common or rare	Resident or transient	Common or rare	Resident or transient	Common or rare	Arrives from south	Departs for south	Resident or transient
	rare	tv	unc	tv	unc					
	fc, unc	tv	c	tv	c	tv	fc			tv
	c	tv	c	tv, sr	c, local	tv	fc			tv
	unc	tv	fc	tv, sr	c, local	tv	unc			tv
		tv	rare			tv	rare			
				wv	once, 17 Dec. '03	wv	once, 25 Feb. '04			
						av	once, 26 Nov. '93			
	unc									
	rare									
	ab	wv	ab	tv, sr	c, oc	tv	fc			tv
		tv	unc							
	fc	tv	fc	tv	fc	tv	fc			tv
	fc	tv	rare			tv	once, 11 Sept. '80			
	unc									
	unc									
	oc	tv	rare			tv	8 Oct. '81			
	sometimes c									
t. '05	rare			av	once, 10 Dec. '79	av	once		11 Nov. '80	
						av	once		17 Nov. '88	
	rare	wv	unc	tv, sr	fc, oc	tv	fc			tv, unc
	rare	wv	c	tv	c	tv				tv
	rare	tv		tv, sr	fc, oc	tv	fc	Mar. 15	Oct. 31	tv
	rare	tv	fc	tv	unc	tv	fc	Mar. 15	Oct. 31	tv
	unc	wv	c	tv, sr	fc, breeds	tv, sr	c, oc, breeds	Mar. 15	Oct. 31	tv
				tv	rare					
				tv		tv				
	rare	tv		tv		tv	c	Mar. 15	Oct. 30, Nov	tv
	unc	tv		tv		tv	fc, Sept		Oct	tv
				tv						
	rare			tv						
	rare	sr	fc	sr	unc	sr	unc			tv
	rare	tv		tv		tv				
				tv	rare					
	unc	tv		tv		tv				
	unc	tv		tv		tv				
						tv	rare	22 Mar. '80		
	unc	wv		wv	c	tv	fc	Mar. 15	Nov	wv
				wv	oc, c 1865					
		tv		tv		tv		Apr	Oct	tv
	c	wv	fc	wv		tv	fc			
	unc			tv						
	unc			tv						
	unc			tv						
	rare	tv		tv		tv				
7 '06	rare									
	unc	tv		tv		tv	fc	Mar. 15	Oct. 31	tv
	unc									

SPECIES RECORDED	OTSEGO			PUTNAM			RENSSELAER						RICHMOND		ROCKLAND		ST LAWRENCE		SARATOGA				SCHENECTADY
	Resident or transient	Common or rare	Leaves for north	Resident or transient	Common or rare	Arrives from south	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Resident or transient	Common or rare	Resident or transient	Common or rare	Resident or transient	Common or rare	Resident or transient	Common or rare	Arrives from south	Departs for south	Resident or transient
Holboell grebe							tv	unc			Oct 12, 16, 20		wv	rare	tv	unc	tv	unc					
Horned grebe	tv			tv	unc	Apr. 8	tv		Apr. 7		Oct 10		tv, wv	fc, unc	tv	c	tv	c	tv	fc			tv
Pied-billed grebe	tv			tv	c	Apr. 10	tv	c	Apr.		Sept	Nov.	tv	c	tv	fc	tv, sr	c, local	tv	fc			tv
Loon	tv			tv	fc	Apr. 4, 13	tv	c	Apr. 5		Oct	Nov	tv	unc			tv, sr	c, local	tv	unc			tv
Black-throated loon							av	?															
Red-throated loon	wv	rare					tv	rare			Sept. 21, 29		tv		tv	rare			tv	rare			
Puffin																							
Black guillemot																							
Brunnich murre				av	once, Dec. '95		av				5 Dec. '01	12 Dec. '93					wv	once, 17 Dec. '03	wv	once, 25 Feb '04			
Razor-billed auk																			av	once, 26 Nov. '93			
Dovekie																							
Skua																							
Pomarine jæger																							
Parasitic jæger																							
Long-tailed jæger																							
Ivory gull																							
Kittiwake	wv	rare											wv	unc									
Glaucous gull																							
Iceland gull							av				21 Nov. '88												
Kumlien gull							av																
Great black-backed gull							wv	rare					wv	rare									
Herring gull	tv	fc		tv	c		tv	fc					wv	ab	wv	ab	tv, sr	c, oc	tv	fc			tv
Ring-billed gull															tv	unc							
Laughing gull																							
Bonaparte gull	tv	unc		tv	unc		tv	fc					tv	fc	tv	fc	tv	fc	tv	fc			tv
Little gull																							
Sabine gull																							
Gull-billed tern																							
Caspian tern																							
Royal tern																							
Cabot tern																							
Trudeau tern																							
Forster tern																			tv	once, 11 Sept. '80			
Common tern	tv	rare		tv	unc		tv	oc					tv	fc	tv	rare							
Arctic tern																							
Roseate tern													tv	unc									
Least tern													tv	unc									
Sooty tern																							
Black tern				tv	rare	9 Apr. '96	tv	rare					tv	oc	tv	rare			tv	8 Oct. '81			
Black skimmer																							
Cory shearwater																							
Greater shearwater																							
Audubon shearwater																							
Sooty shearwater																							
Black-capped petrel																							
Scaled petrel																							
Leach petrel							av				Oct. (?) '79	13 Nov '19											
Wilson petrel													sv	sometimes c									
Yellow-billed tropic-bird																							
Booby																							
Gannet													tv, Sept. '05	rare			av	once, 10 Dec. '79	av	once		11 Nov. '80	
Cormorant																							
Double-crested cormorant							tv	rare			21 Sept. '88	13 Nov '9										17 Nov. '88	
American white pelican																			av	once			
Brown pelican																							
Man-o'-war bird																							tv, unc
American merganser	tv	unc	Mar. 26, 30	tv	c	Mar. 25	tv	fc		Mar. 3	Jan. 2, 21		wv	rare	wv	unc	tv, sr	fc, oc	tv	fc			tv
Red-breasted merganser	tv	fc	Mar. 23, 25	tv	c		tv	fc					wv	rare	wv	c	tv	c	tv		Mar. 15	Oct. 31	tv
Hooded merganser	tv	oc		tv	unc	Mar. 20	tv	fc					wv	rare	tv		tv, sr	fc, oc	tv	fc	Mar. 15	Oct. 31	tv
Mallard	tv	unc		tv	fc		tv	fc					tv	rare	tv	fc	tv	unc	tv	fc	Mar. 15	Oct. 31	tv
Black duck	tv	fc		tv	c	Mar. 18	tv	c	Mar. 16, Apr. 9	Apr. 12	Feb. 21		wv	unc	wv	c	tv, sr	fc, breeds	tv, sr	c, oc, breeds	Mar. 15		
Gadwall							tv	oc									tv	rare					
Widgeon																							
Baldpate							tv										tv		tv				
European teal																							
Green-winged teal	tv	unc		tv			tv	c					tv	rare	tv		tv		tv	c	Mar. 15	Oct. 30, Nov	tv
Blue-winged teal	tv	unc		tv			tv	c					tv	unc	tv		tv		tv	fc, Sept		Oct.	tv
Cinnamon teal																							
Shoveler																							
Pintail	tv	unc		tv			tv	oc					tv										
Wood duck	sr	unc		sr, breeds	unc	Apr. 1	tv, sr	fc, rare					sr, tv	rare									tv
Rufous crested duck														rare					sr	unc			
Redhead							tv	rare					tv	rare	sr	fc	sr	unc					
Canvasback							tv	rare							tv				tv				
American scaup duck							tv	fc					tv	unc	tv		tv	rare	tv				
Lesser scaup duck							tv	fc					tv	unc	tv		tv		tv	rare	22 Mar. '80		
Ring-necked duck													wv	unc	tv		tv		tv	fc	Mar. 15	Nov	wv
American golden-eye	tv	fc		tv	c		wv								wv		wv	c					
Barrow golden-eye													wv		wv		wv	oc, c 1865	tv		Apr	Oct	tv
Bufflehead	tv	oc		tv	c		tv	c					wv		tv		tv		tv	fc			
Old squaw				wv	fc		tv	c						c	wv	fc	wv						
Harlequin duck																							
Labrador duck																							
American eider																							
King eider																							
American scoter													wv										
White-winged scoter							tv	oc			Sept. 29		wv	unc			tv						
Surf scoter							tv	oc					wv	unc			tv						
Ruddy duck				tv	unc		tv	oc				Nov. 1	tv	unc			tv						
Lesser snow goose							tv	oc						rare	tv		tv		tv				
Greater snow goose													tv, May '06				tv						
Blue goose	tv	rare, 23 Mar. '98												rare									
Am. white fronted goose																							
Canada goose	tv, wv	fc, oc		tv	c	Mar	tv	c					t						tv	fc	Mar. 15	Oct. 31	tv
Hutchins goose							av	once						unc	tv		tv						
White-bellied brant							tv	oc					tv										
Black brant														unc									
Barnacle goose																							
Whistling swan																							
Trumpeter swan							av																
White ibis																							
Glossy ibis																							
White-faced glossy ibis																							

SPECIES RECORDED	SCHOHARIE		SCHUYLER			SENECA			STEUBEN		
	Resident or transient	Common or rare	Resident or transient	Common or rare	Leaves for north	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	B
Holboell grebe	wv	rare, 10 Feb. '05	wv	rare		wv	rare		tv	rare	
Horned grebe	tv		tv	fc		tv	fc		tv	fc	
Pied-billed grebe	tv		tv	c		tv, sr	c, unc		tv	c	
Loon	tv		tv	fc		tv	fc		tv	rare	
Black-throated loon											
Red-throated loon			tv	rare		tv	rare				
Puffin											
Black guillemot											
Brünnich murre			wv	rare		wv	oc, Dec. 22—May		wv	twice	
Razor-billed auk											
Dovekie											
Skua											
Pomarine jæger											
Parasitic jæger											
Long-tailed jæger											
Ivory gull											
Kittiwake						wv	rare				
Glaucous gull						wv	rare				
Iceland gull						wv	rare				
Kümlien gull											
Great black-backed gull						wv	rare				
Herring gull	tv	fc	tv, wv	c, fc		tv, wv	c, fc		tv	c	
Ring-billed gull			tv	oc		tv	oc				
Laughing gull											
Bonaparte gull	tv	oc	tv	fc		tv	fc		tv	oc	
Little gull											
Sabine gull						tv	rare				
Gull-billed tern											
Caspian tern											
Royal tern											
Cabot tern											
Trudeau tern											
Forster tern											
Common tern			tv	oc		tv	fc		tv	oc	
Arctic tern											
Roseate tern											
Least tern											
Sooty tern											
Black tern			tv	oc		tv, sr	fc, rare				
Black skimmer											
Cory shearwater											
Greater shearwater											
Audubon shearwater											
Sooty shearwater											
Black-capped petrel											
Scaled petrel											
Leach petrel											
Wilson petrel											
Yellow-billed tropic-bird											
Booby											
Gannet											
Cormorant											
Double-crested cormorant						tv	rare				
American white pelican						tv	once				
Brown pelican											
Man-o'-war bird											
American merganser	tv		tv		Mar. 30	wv	fc		wv	fc	
Red-breasted merganser	tv		tv			tv, wv	c, oc		tv	unc	
Hooded merganser	tv		tv			tv	fc		tv	fc	
Mallard	tv		tv	fc	Mar. 14	tv, res	fc, rare		tv, sr	fc, rare	yes
Black duck	tv		tv, sr	c, rare	Mar. 7, 11, 17	tv, res	ab, unc	yes	tv	fc	
Gadwall						tv	rare		tv	rare	
Widgeon						tv	rare				
Baldpate			tv	fc		tv	fc		tv	rare	
European teal											
Green-winged teal	tv		tv	c		tv	c		tv	rare	
Blue-winged teal	tv		tv	c		tv, sr	c, unc	yes	tv	rare	
Cinnamon teal											
Shoveler			tv	oc		tv	fc		tv	once	
Pintail			tv	fc		tv	c		tv	rare	
Wood duck	tv, sr	fc, rare	tv, sr	fc, rare	Mar. 31, Apr. 8	tv, sr	c, fc	yes	tv	unc	yes
Rufous-crested duck											
Redhead			tv		Mar. 3	tv, wv	fc, oc		tv	rare	
Canvasback			tv	oc		tv, wv	fc, oc				
American scaup duck			tv	c		tv	c		tv	oc	
Lesser scaup duck			tv	c		tv	c		tv	oc	
Ring-necked duck			tv	oc		tv	fc, irreg				
American golden-eye	tv		wv	c		wv	c		wv	fc	
Barrow golden-eye						wv	rare				
Buffle-head	tv		tv	c		tv	fc		tv	fc	
Old squaw			tv, wv	fc		tv, wv	c, oc		tv	c	
Harlequin duck											
Labrador duck											
American eider											
King eider									wv	once	
American scoter			tv			tv			tv		
White-winged scoter			tv	fc		tv	fc		tv	fc	
Surf scoter			tv	rare		tv	unc		tv		
Ruddy duck			tv	fc		tv, sr	c, rare	once	tv	c	
Lesser snow goose											
Greater snow goose											
Blue goose						tv	rare				
Am. white-fronted goose											
Canada goose	tv		tv	fc		tv	c		tv	fc	
Hutchins goose											
White-bellied brant						tv	rare		tv	rare	
Black brant											
Barnacle goose											
Whistling swan						tv	oc		tv	rare	
Trumpeter swan											
White ibis											
Glossy ibis						av, May '02	11, 21 May '07				
White-faced glossy ibis											

SUFFOLK							SULLIVAN	
ident or nsient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare
	unc, rare		Apr. 10, 21	Oct. 22, Nov. 20				
	ab, c		Apr. 13, 17, 22	Oct., Nov. 3			tv	
	unc, rare		Apr.		Dec. 15		tv	
	c, fc		May 20, 30, June 30	Sept. 15, Oct. 15, 30			tv	
	once	29 Apr. '93						
	fc, rare		May 2, 30, June 30	Oct. 6, 11, Nov. 2				
	rare		30 Mar. '02	15 Dec. '82				
	once							
	irreg		Feb. 20, Mar. 2, 23	Dec. 6, 12, 28				
	irreg		Jan. 26, Feb. 2, 6	Nov. 25, Dec. 3, 10				
	oc		Jan. 10, 15, Feb. 6	Sept. 8, Nov. 23, 28				
	twice		9 Jan. '86	10 Aug. '96				
	unc	May 23	June 15, July 7	Aug. 2, 7, 11	Oct. 18, 30			
	reg	June 15		July 29, Aug. 2, 25	Oct. 30, Nov. 15			
	rare							
				5 Jan. '93				
	fc, unc		Mar. 17	Oct., Nov. 12, 22				
	unc		Mar. 4, 19	Dec. 11				
	oc			30 Nov. '88				
	fc		Mar. 13, 17	Sept. 22, Oct. 30				
	ab		May	Aug. 2, 12, 25			tv	
	c, fc		Mar., Apr. 10	Aug. 27, Sept. 11, 22				
	unc, formerly	Apr.	May 30		Sept.			
	c, oc	Apr.	Apr. 24, May 4	Oct. 12, Nov.	Dec. 10, 28		tv	
				15 Sept. '87				
			July '37	6 Oct. '99				
	rare	8 July '84						
	unc	May 11		July 21, Aug. 12, 21	Sept. 3, 7			
		27 Aug. '31						
	oc			7 Sept. '82	17 Sept. '83			
	ab, c	May 9, 15, June 5			Aug. 15, Sept. 17, Oct. 1	yes		
	rare	18 July '84						
	unc			Aug. 6, 16	Sept. 7	yes		
	fc, formerly	May 22		Aug. 22	Sept. 5, 15	June 2, July 22		
		13 Sept. '78			18 Sept. '83			
	c, irreg			July 19, Aug. 3	Sept. 5, 10			
		6 May '93						
	unc	Aug. 6, 16			Oct. 18, 20, Nov. 29			
	fc	Aug			Oct.			
		1 Aug. '87						
	unc	June 19, 23						
		July '50						
	unc	May 4, 30	June 15		July 27			
	c	May, June 20, 25			Sept. 14, Oct.			
	once							
	c, oc		May 20	Oct., Nov. 12, 23	Dec. 23, Jan. 5			
	unc							
	c	Apr. 3, 14, 27	May 23, June 16, 29	Aug. 12, Sept. 10, 21	Oct. 26, Nov. 19			
	twice	4 Aug. '86						
	fc, oc		Mar. 1, 20	Oct. 15, Nov. 4			wv	
	ab, unc	Mar. 1, 25	May 15, June 15	Sept. 15, Nov. 18, Oct. 23	Dec. 5		tv	fc
	unc, rare		May	Nov. 19			tv	
	unc, rare			Sept. 14, Oct. 17	Nov. 9, 25			
	ab, unc		Apr. 30, May 1	Oct. 21, Nov. 19, 28		yes	tv	unc
	rare	9 Apr. '79		Nov. 24				
		5 Feb. '02		27 Nov. '01	6 Jan. '73			
	fc	Feb. 26, Mar. 20, Apr. 3	Apr. 9, 14	Aug. 9, Sept. 11	Nov. 16, 27, Dec. 13			
	rare spr., unc		Apr.	Sept. 5, 26, Oct. 4	Oct. 26, Nov. 25, Dec. 17		tv	
	fc, rare, spring	May 5		Sept. 1, 14	Nov. 1, 12, Dec. 12	yes	tv	
	rare	Feb. 12, Mar. 19		Nov. 10, 15	Nov. 18, 25			
	fc	Feb. 15, 24, Mar. 6	Mar. 24, Apr. 6, 15	Aug. 25, Sept. 15, 26	Nov. 19, 30, Dec. 1			
	unc, rare	Mar. 23, 29		Aug., Oct. 16	Oct. 29, Nov. 24, Dec. 15	yes	sr	rare
	ab, irreg	Feb. 19, 26, Mar. 19	Apr. 15	Oct. 1, 6, Nov.	Dec.			
	rare	Feb. 14, 23, Mar. 23	Apr. 6	Oct. 12, 17	Dec. 6, 11			
	ab, c		Apr. 16	Sept. 15, Oct. 11, 20				
	ab, oc			Oct.	Nov. 18, Dec. 20		tv	oc
	rare	Apr. 27						
	irreg., c		Apr. 6, 19	Nov. 3, 11, 15			tv	
	c, fc	Mar.	Apr. 20	Sept. 16, Oct. 1, 19	Nov. 23, Dec. 15		tv	
	ab		Apr. 15, May 10, 27	Oct., Nov. 1, 19			tv	
	rare		Jan.	Nov. 10, 22, Dec. 2				
	formerly							
	oc		25 Mar. '94	Nov. 8, 16 Dec. '91				
	unc		Mar. 19, Apr. 27	Nov. 1, Dec. 2, 14				
	c		Mar., Apr. 11, 25	Sept. 21, Oct. 15				
	fc, ab		May 1, 5	Sept. 15, 28, Oct.				
	ab, c		May	Oct. 10, 22				
	irreg			Oct. 29, Nov. 17			tv	rare
	twice			Oct. 8, 29				
	unc	Apr. 3	Apr.	Sept. 28, Oct. 9, 29	Nov. 15, Dec.			
	rare	21 Mar. '87	28 Apr. '83		22 Nov. '93			
	rare	Mar. 2, 18	Apr. 5	Oct. 18	Nov. 26, 28			
	ab, fc	Mar. 13, 24, 31	Apr. 21, May 7	Sept. 8, Oct. 11, 19	Nov. 27, Dec. 21		tv	
	rare							
	c, oc	Feb. 15, 27, Mar. 19	Apr. 28, May 1, 28	Oct. 14, Nov. 4, 28	Nov. 30, Dec.			
	twice	spring '89		1840				
	rare			26 Nov. '86				
		12 Sept. '44						

SPECIES RECORDED	SCHOHARIE		SCHUYLER			SENECA			STEUBEN			SUFFOLK							SULLIVAN	
	Resident or transient	Common or rare	Resident or transient	Common or rare	Leaves for north	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare
Holboell grebe	wv	rare, to Feb '05	wv	rare		wv	rare		tv	rare		tv, wv	unc, rare		Apr. 10, 22	Oct. 22, Nov. 20				
Horned grebe	tv		tv	fc		tv	fc		tv	fc		tv, wv	ab, c		Apr. 13, 17, 22	Oct., Nov. 3			t	
Pied-billed grebe	tv		tv	c		tv, sr	c, unc		tv	c		tv, sr	unc, rare		Apr.		Dec 15		tv	
Loon	tv		tv	fc		tv	fc		tv	rare		tv, wv	c, fc		May 20, 30, June 30	Sept. 15, Oct. 15, 30			tv	
Black-throated loon												av	once	29 Apr. '03						
Red-throated loon			tv	rare		tv	rare					tv, wv	fc, rare		May 2, 30, June 30	Oct. 6, 11, Nov. 2				
Pullin												wv	rare		30 Mar. '02	15 Dec. '82				
Black guillemot												av	once							
Brünnich murre			wv	rare		wv	oc, Dec 22—May		wv	twice		wv	irreg		Feb. 20, Mar. 2, 23	Dec. 6, 12, 28				
Razor-billed auk												av	irreg		Jan. 26, Feb. 2, 6	Nov. 25, Dec. 3, 10				
Dovekie												av	oc		Jan. 10, 15, Feb. 6	Sept. 8, Nov. 23, 28				
Skua												av	twice		9 Jan. '86	10 Aug. '96				
Pomarine jaeger												tv	unc	May 23	June 15, July 7	Aug. 2, 7, 11	Oct. 18, 30			
Parasitic jaeger												tv	reg	June 15		July 29, Aug. 2, 25	Oct. 30, Nov. 15			
Long-tailed jaeger												tv	rare							
Ivory gull												av				5 Jan. '93				
Kittiwake			wv	rare		wv	rare					tv, wv	fc, unc		Mar. 17	Oct., Nov. 12, 22				
Glaucous gull			wv	rare		wv	rare					av	unc		Mar. 4, 19	Dec 11				
Iceland gull			wv	rare		wv	rare					wv	oc			30 Nov. '88				
Kumlien's gull																				
Great black-backed gull			wv	rare								wv	fc		Mar. 13, 17	Sept. 22, Oct. 30				
Herring gull	tv	fc	tv, wv	c, fc		tv, wv	c, fc		tv	c		wv, sr	ab		May	Aug. 2, 12, 25			tv	
Ring-billed gull			tv	oc		tv	oc					tv, wv	c, fc		Mar., Apr. 10	Aug. 27, Sept. 11, 22				
Laughing gull												tv, sr	unc, formerly	Apr.	May 30		Sept			
Bonaparte gull	tv	oc	tv	fc		tv	fc		tv	oc		tv, wv	c, oc	Apr.	Apr. 24, May 4	Oct 12, Nov	Dec. 10, 28		tv	
Little gull												av				15 Sept. '87				
Sabine's gull						tv	rare					av			July '37	6 Oct. '99				
Gull-billed tern												tv	rare	8 July '84						
Caspian tern												tv	unc	May 11		July 21, Aug. 12, 21	Sept 3, 7			
Royal tern												av		27 Aug. '31						
Cabot's tern																				
Trudeau's tern																				
Forster's tern												tv	oc			7 Sept. '82	17 Sept. '83			
Common tern			tv	oc		tv	fc		tv	oc		tv, sr	ab, c	May 9, 15, June 5			Aug. 15, Sept 17, Oct 1	yes		
Arctic tern												tv	rare	18 July '84						
Roseate tern												sr, tv	unc			Aug. 6, 16	Sept 7	yes		
Least tern												tv, sr	fc, formerly	May 22		Aug. 22	Sept 5, 15	June 2, July 22		
Sooty tern												av		13 Sept. '78			18 Sept '83			
Black tern			tv	oc		tv, sr	fc, rare					tv	c, irreg			July 19, Aug. 3	Sept 5, 10			
Black skimmer												av		6 May '93						
Cory's shearwater												tv					Oct 18, 20, Nov. 29			
Greater shearwater												tv	unc	Aug. 6, 16						
Audubon's shearwater												tv	fc	Aug			Oct			
Sooty shearwater												av		1 Aug. '87						
Black-capped petrel												tv	unc	June 19, 23						
Scale's petrel												av		July '50						
Leach's petrel												tv								
Wilson's petrel												tv	unc	May 4, 30	June 15		July 27			
Yellow-billed tropic bird												sv	c	May, June 20, 25			Sept 14, Oct			
Hobby																				
Gannet												av	once							
Cormorant												tv, wv	c, oc		May 20	Oct, Nov. 12, 23	Dec 23, Jan. 5			
Double-crested cormorant						tv	rare					tv	unc							
American white pelican						tv	once					tv	c	Apr. 3, 14 27	May 23, June 16, 29	Aug. 12, Sept. 10, 21	Oct 16, Nov. 19			
Brown pelican																				
Man-o'-war bird												av	twice	4 Aug. '86						
American merganser	tv		tv		Mar. 30	wv	fc		wv	fc		tv, wv	fc, oc		Mar 1, 20	Oct 15, Nov 4			tv	fc
Red-breasted merganser	tv		tv			tv, wv	c, oc		tv	unc		tv, wv	ab, unc	Mar. 1, 25	May 15, June 15	Sept 15, Nov. 18, Oct 21	Dec 5		tv	
Hooded merganser	tv		tv			tv	fc		tv	fc		tv, res	unc, rare		May	Nov 19			tv	
Mallard	tv		tv	fc	Mar. 14	tv, res	fc, rare		tv, sr	fc, rare	yes	tv, wv	unc, rare			Sept 14, Oct 17	Nov 9, 25		tv	unc
Black duck	tv		tv, sr	c, rare	Mar 7, 11, 17	tv, res	ab, unc	yes	tv	fc		wv, res	ab, unc		Apr. 30, May 1	Oct 21, Nov. 19, 28		yes		
Gadwall						tv	rare		tv	rare		tv	rare	9 Apr. '79		Nov 24				
Widgeon						tv	rare							5 Feb. '02		27 Nov '01	6 Jan '23			
Baldpate			tv	fc		tv	fc		tv	fc		tv	fc	Feb. 26, Mar. 20, Apr. 3	Apr. 9, 14	Aug. 9, Sept. 11	Nov 16, 27, Dec 13			
European teal																			tv	
Green-winged teal	tv		tv	c		tv	c		tv	rare		tv, wv	rare spr, unc		Apr	Sept 5, 26, Oct 4	Oct. 26, Nov. 25, Dec. 17		tv	
Blue-winged teal	tv		tv	c		tv, sr	c, unc	yes	tv	rare		tv, sr	fc, rare, spring	May 5		Sept. 1, 14	Nov. 1, 12, Dec. 12	yes		
Cinnamon teal																				
Shoveler			tv	oc		tv	fc		tv	once		tv	rare	Feb. 12, Mar. 19		Nov. 10 15	Nov. 18, 25			
Pintail			tv	fc		tv	c		tv	rare		tv	fc	Feb. 15, 24, Mar. 6	Mar. 24, Apr. 6, 15	Aug 25 Sept 15, 26	Nov. 19, 30, Dec. 1			rare
Wood duck	tv, sr	fc, rare	tv, sr	fc, rare	Mar 31, Apr. 8	tv, sr	c, fc	yes	tv	unc	yes	tv, sr	unc, rare	Mar. 23, 29		Aug, Oct. 10	Oct. 29, Nov. 24, Dec. 15	yes		
Redhead			tv		Mar. 1	tv, wv	fc, oc					av								
Canvasback			tv	oc		tv, wv	fc, oc		tv	rare		tv	ab, irreg	Feb. 19, 26, Mar. 19	Apr. 15	Oct 1, 6, Nov.	Dec. 6, 11			
American scaup duck			tv	fc		tv	c		tv	oc		tv, wv	rare	Feb. 14, 23, Mar. 23	Apr. 6	Oct 12, 17				
Lesser scaup duck			tv	c		tv	c		tv	oc		tv, wv	ab, c		Apr. 16	Sept 15, Oct 11, 20	Nov 18, Dec 20		tv	
Ring-necked duck			tv	c		tv	c		tv	oc		tv	ab, oc			Oct				
American golden-eye	tv		wv	c		tv	fc, irreg					wv	rare	Apr. 27					tv	
Barrow's golden-eye						wv	c		wv	fc			irreg., c		Apr. 6, 19	Nov 3, 11, 15				
Buffle-head	tv		tv			wv	rare					tv, wv							tv	
Old-squaw			tv, wv	fc		tv	fc		tv	fc		tv	c, fc	Mar.	Apr. 20	Sept 17 Oct 1, 19	Nov 21 Dec 15		tv	
Harlequin duck						tv, wv	c, oc		tv			tv	ab		Apr. 15, May 10, 27	Oct, Nov 1, 19				
Labrador duck												tv	rare			Nov 10, 22, Dec 2				
American eider												tv	formerly		Jan.					
King eider												tv	oc			Nov 8, 16 Dec '01				
American scoter			tv			tv			tv	nce		tv	unc		25 Mar '94	Nov 1, Dec 2, 14				
White-winged scoter			tv	fc		tv			tv			tv, tv	c		Mar. 19, Apr 27	Sept 21, Oct 15				
Surf scoter			tv	rare		tv	fc		tv	fc		tv, sr	fc, ab		Mar, Apr. 11, 25	Sept 15, 28, Oct				
Ruddy duck			tv	fc		tv	unc		tv			tv, wv	ab, c		May 1, 5	Oct 16 22			tv	rare
Lesser snow goose						tv, sr	c, rare	once	tv			tv	irreg		May	Oct 19, Nov 17				
Greater snow goose												tv	twice			Oct 8, 29				
Blue goose												tv	unc	Apr 3	Apr	Sept 28, Oct 9, 29	Nov 15 Dec			
Am. white-fronted goose						tv	rare					tv	rare	21 Mar. '87	28 Apr. '83		23 Nov 91			
Canada goose	tv		tv	fc		tv	c		tv	fc		tv, wv	rare	Mar. 2, 18	Apr 5	Oct 18	Nov 26 28		tv	
Hutchins's goose												tv	ab, fc	Mar. 13, 24, 31	Apr. 21, May 7	Sept 8, Oct 11, 19	Nov 27, Dec 21			
White-bellied brant												tv, wv	rare							
Black brant						tv	rare		tv	rare		av	fc, oc	Feb 15 27, Mar. 19	Apr. 28, May 1, 28	Oct 14, Nov. 4, 28	Nov 30 Dec			
Barnacle goose													twice	spring '80		1840				
Whistling swan																				
Trumpeter swan						tv	oc		tv	rare			rare			26 Nov '86				
White ibis																				
Glossy ibis																				
White-faced glossy ibis						av, May '02	11, 21 May '07							12 Sept '44						

SPECIES RECORDED	TIOGA			TOMPKINS						ULSTER		
	Resident or transient	Common or rare	Arrives from south	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Resident or transient	Common or rare	Br
Holboell grebe	tv	unc	Apr. 10	wv	rare							
Horned grebe	tv	fc	Apr. 25	tv, wv	c, oc	Apr. 4, 16, 21	May 1, 12	Oct. 6, 12	Nov. 10, 30	tv		
Pied-billed grebe	tv	unc	Apr. 5, 15	tv, sr	c, rare	Apr. 1, 15			Nov. 1, 10	tv		
Loon	tv	unc	Apr. 3, 14	tv, wv	fc, oc	Apr. 16, May 2	May	Oct	Nov	tv		
Black-throated loon												
Red-throated loon												
Puffin												
Black guillemot												
Brünnich murre				wv	rare, 1899							
Razor-billed auk												
Dovekie												
Skua												
Pomarine jæger												
Parasitic jæger												
Long-tailed jæger												
Ivory gull												
Kittiwake												
Glaucous gull				wv	once, 1896							
Iceland gull												
Kümlien gull												
Great black-backed gull												
Herring gull	tv	oc		tv, wv	c, fc					tv	c	
Ring-billed gull												
Laughing gull												
Bonaparte gull	tv	oc		tv	fc	Apr. 23	May 16, 30			tv		
Little gull												
Sabine gull												
Gull-billed tern												
Caspian tern												
Royal tern												
Cabot tern												
Trudeau tern												
Forster tern												
Common tern												
Arctic tern												
Roseate tern												
Least tern												
Sooty tern												
Black tern				tv	unc			Aug. 22, 30	Sept. 5, 11			
Black skimmer												
Cory shearwater												
Greater shearwater												
Audubon shearwater												
Sooty shearwater												
Black-capped petrel										av	once, 26 Jan. '95	
Scaled petrel												
Leach petrel												
Wilson petrel												
Yellow-billed tropic-bird												
Booby												
Gannet												
Cormorant												
Double-crested cormorant				tv	rare							
American white pelican												
Brown pelican												
Man-o'-war bird												
American merganser	wv	c	Apr. 30	wv	fc		Mar. 25, Apr. 27			tv		
Red-breasted merganser	tv	c		tv	c	Apr. 12, 17	May			tv		
Hooded merganser	tv	unc		tv	fc		May 5		Oct. 29	tv		
Mallard	tv	rare		tv, wv	fc, oc	Mar. 14, 29	Apr. 22, May 6		Oct. 29	tv		
Black duck	tv	c		tv	fc	Mar. 18, Apr. 12	Apr. 23, 30, May 5	Oct. 9	Nov. 19	tv, res	c, oc	
Gadwall												
Widgeon												
Baldpate	tv	rare		tv	fc		Apr. 26			tv		
European teal												
Green-winged teal	tv	rare		tv	fc	Mar. 23				tv		
Blue-winged teal	tv	rare		tv	fc	Apr. 13		Sept. 16		tv, sr		yes
Cinnamon teal												
Shoveler				tv	unc		Apr. 26					
Pintail				tv	fc	Apr. 8				tv		
Wood duck	tv, sr	unc, rare		tv, sr	unc, rare					tv, sr	fc, oc	rare
Rufous-crested duck												
Redhead	tv	rare		tv	c	Apr. 23				tv		
Canvasback				wv, tv	fc, irreg		Mar. 21	Oct. 13, 29				
American scaup duck				tv, wv	c, fc		May 5, 18			tv		
Lesser scaup duck	tv	unc		tv, wv	c, oc	Apr. 7	May 16	Oct. 12		tv		
Ring-necked duck												
American golden-eye	wv	c		wv	c		Apr. 6	Oct. 29		tv, wv	c, fc	
Barrow golden-eye												
Buffle-head	tv	c		tv, wv	fc, oc	Apr. 21				tv	fc	
Old squaw	tv	c	Apr. 1, 7	tv, wv	fc		Apr. 26			wv	fc	
Harlequin duck												
Labrador duck												
American eider												
King eider				wv	once							
American scoter	tv	rare								tv		
White-winged scoter				tv	c					tv		
Surf scoter												
Ruddy duck	tv	oc		tv	unc				Oct. 19	tv		
Lesser snow goose												
Greater snow goose	tv	once, 1888		tv	rare	Mar. '76						
Blue goose												
Am. white-fronted goose												
Canada goose	tv	fc		tv, wv	c, oc	Mar. 13, 23		Oct		tv		
Hutchins goose												
White-bellied brant												
Black brant												
Barnacle goose												
Whistling swan												
Trumpeter swan												
White ibis												
Glossy ibis												
White-faced glossy ibis												

WARREN		WASHINGTON					WAYNE		WESTCHESTER			
ent ent	Common or rare	Resident or transient	Common or rare	Arrives from south	Returns from north	Departs for south	Resident or transient	Common or rare	Resident or transient	Common or rare	Arrives from south	Leaves for north
	unc	tv	oc				tv	oc	tv	rare		
	c	tv					tv		tv, sr	c, rare		
	c	tv, sr	fc				tv, sr	oc	tv, sr	c, fc	Apr. 6	
	oc	sr	oc				tv		tv	c	Mar. 8, 20	
		tv					tv	oc	tv	rare		
	12 Dec. '93						wv	once, Dec. 11	av			
									av			
									av			
		wv	once									
									av			3 Mar. '94
	unc, c	tv	fc				tv, wv	c, unc	tv, wv	c, fc		
									tv	oc		
	unc	tv					tv	fc	tv	oc	Apr.	
							tv	oc	tv	rare		
	rare						tv	fc	tv	rare		
		av										
		tv	oc				tv	oc	av			22 June '76
	oc	tv	fc				tv, res	fc, oc	tv, wr	c		
	fc	tv, res	fc, rare				tv, wv	c, oc	tv	c		Apr. 30
	fc	tv, sr	c, rare				tv, sr	fc, oc	tv, wr	oc	Mar. 26	Apr. 15
	rare	tv, sr	c, rare				tv, sr	fc, rare	tv	rare	Mar. 10	
	c, fc	tv, sr	c, unc	Mar. 3			tv, res	c, oc	tv, sr	c, oc	Mar. 6	
		tv	oc				tv	rare				
		tv	fc				tv	fc	tv	c	Mar. 11	Apr. 12
		tv	fc				tv	fc	tv	fc	Mar	Apr
		tv, sr	c, unc				tv, sr	c, unc	tv	c		
		tv	oc				tv	unc	tv	rare		
		tv	oc				tv	fc	tv	c	Mar. 15	Apr. 10
	fc, breeds	sr	fc				tv, sr	fc, unc	tv, sr	fc, oc		
		tv	rare				tv	fc	tv	c	Apr. 1	Apr. 24
		tv	rare				tv	irreg	tv	rare		
		tv	fc	Apr. 7	Aug. 21, Sept. 20	Nov. 29	tv	c	tv, wv	c, fc	Mar. 22	Apr. 13
		tv	fc				tv	c	tv, wv	c, oc	Apr	
							tv	oc	tv	rare	Apr	
	c	wv	ab				wv	c	tv, wv	c		May
							wv	once, Nov. '04				
	fc	tv	c				tv	fc	tv	fc		
		wv	oc				wv	c	wv, tv	fc		Apr. 6
									av			
							wv	rare				
							tv		tv, wv	rare		
		tv	oc				tv		tv, wv	fc		
							tv		tv, wv	c		
							tv	fc	tv	c	Mar. 14	Apr. 4
	once, 19 Nov. '81								tv	rare	8 Apr. '82	
	c	tv		Mar.			tv	fc	tv	c	Mar. 1, 14, 25	
		av		Apr.								
									av			
		tv	rare				tv	rare	tv	rare		

SPECIES RECORDED	TIOGA			TOMPKINS						ULSTER			WARREN		WASHINGTON					WAYNE		WESTCHESTER			
	Resident or transient	Common or rare	Arrives from south	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Resident or transient	Common or rare	Arrives from south	Returns from north	Departs for south	Resident or transient	Common or rare	Resident or transient	Common or rare	Arrives from south	Leaves for north
Holboell grebe	tv	unc	Apr. 10	wv	rare								tv	unc	tv	oc				tv	oc	tv	rare		
Horned grebe	tv	fc	Apr. 25	tv, wv	c, oc	Apr. 4, 16, 21	May 1, 12	Oct. 6, 12	Nov. 10, 30	tv			tv	c	tv					tv		tv, sr	c, rare		
Pied-billed grebe	tv	unc	Apr. 5, 15	tv, sr	c, rare	Apr. 1, 15			Nov. 1, 10	tv			tv	c	tv, sr	fc				tv, sr	oc	tv, sr	c, fc	Apr. 6	
Loon	tv	unc	Apr. 3, 14	tv, wv	fc, oc	Apr. 16, May 2	May	Oct.	Nov.	tv			tv, sr	oc	sr	oc				tv		tv	c	Mar. 8, 20	
Black-throated loon																									
Red-throated loon															tv					tv	oc	tv	rare		
Puffin																									
Black guillemot				wv	rare, 1899								wv	12 Dec. '93						wv	once, Dec 11	av			
Brünnich murre																						av			
Razor-billed auk																						av			
Dovekie																									
Skua																									
Pomarine jæger																									
Parasitic jæger																									
Long-tailed jæger																									
Ivory gull															wv	once									
Kittiwake				wv	once, 1896																	av			3 Mar. '94
Glaucous gull																									
Iceland gull																									
Kümlien gull																									
Great black-backed gull										tv	c		sr, tv	unc, c	tv	fc				tv, wv	c, unc	tv, wv	c, fc		
Herring gull	tv	oc		tv, wv	c, fc																	tv	oc		
Ring-billed gull																									
Laughing gull										tv			tv	unc	tv					tv	fc	tv	oc	Apr.	
Bonaparte gull	tv	oc		tv	fc	Apr. 23	May 16, 30																		
Little gull																									
Sabine gull																									
Gull-billed tern																									
Caspian tern																									
Royal tern																									
Cabot tern																									
Trudeau tern																				tv	oc	tv	rare		
Forster tern																									
Common tern																									
Arctic tern																									
Roseate tern																									
Least tern																						tv	rare		
Sooty tern													tv	rare						tv	fc				
Black tern				tv	unc			Aug. 22, 30	Sept. 5, 11																
Black skimmer																									
Cory shearwater																									
Greater shearwater																									
Audubon shearwater																									
Sooty shearwater										av	once, 26 Jan. '95														
Black-capped petrel																									
Scaled petrel															av										
Leach petrel																									
Wilson petrel																									
Yellow-billed tropic-bird																									
Booby																									
Gannet																									22 June '76
Cormorant															tv	oc				tv	oc	av			
Double-crested cormorant				tv	rare																				
American white pelican																									
Brown pelican																									
Man-o'-war bird													tv, sr	oc	tv	fc				tv, res	fc, oc	tv, wr	c		Apr. 30
American merganser	wv	c	Apr. 30	wv	fc		Mar. 25, Apr. 27			tv			tv	fc	tv, res	fc, rare				tv, wv	c, oc	tv	c		Apr. 15
Red-breasted merganser	tv	c		tv	c	Apr. 12, 17	May			tv			tv	fc	tv, sr	c, rare				tv, sr	fc, oc	tv, wr	oc	Mar. 26	
Hooded merganser	tv	unc		tv	fc		May 5		Oct. 29	tv			tv	rare	tv, sr	c, rare				tv, sr	fc, rare	tv	rare	Mar. 10	
Mallard	tv	rare		tv, wv	fc, oc	Mar. 14, 29	Apr. 22, May 6		Oct. 29	tv			tv, sr	c, fc	tv, sr	c, unc	Mar. 3			tv, sr	c, oc	tv, sr	c, oc	Mar. 6	
Black duck	tv	c		tv	fc	Mar. 18, Apr. 12	Apr. 23, 30, May 5	Oct. 9	Nov. 19	tv, res	c, oc				tv, res	c, rare				tv, res	c, oc				
Gadwall															tv	oc				tv	rare	tv	c	Mar. 11	Apr. 12
Widgeon													tv												
Baldpate	tv	rare		tv	fc		Apr. 26			tv			tv		tv	fc				tv	fc	tv	fc	Mar	Apr
European teal													tv									tv	c		
Green-winged teal	tv	rare		tv	fc	Mar. 23				tv			tv		tv	fc				tv, sr	c, unc				
Blue-winged teal	tv	rare		tv	fc	Apr. 13		Sept. 16		tv, sr		yes, 1886	tv		tv, sr	c, unc						tv	rare		
Cinnamon teal																				tv	unc	tv	c	Mar. 15	Apr. 10
Shoveler				tv	unc		Apr. 26						tv		tv	oc				tv	fc	tv, sr	fc, oc		
Pintail				tv	fc	Apr. 8				tv			tv, sr		tv	oc				tv, sr	fc, unc				
Wood duck	tv, sr	unc, rare		tv, sr	unc, rare					tv, sr	fc, oc	rarely	tv, sr	fc, breeds	sr	fc						tv	c	Apr. 1	Apr. 24
Rufous-crested duck													tv							tv	fc	tv	rare		
Redhead	tv	rare		tv	c	Apr. 23				tv					tv	rare				tv	irreg	tv, wv	c, fc	Mar. 22	Apr. 13
Canvasback				wv, tv	fc, irreg		Mar. 21	Oct. 13, 29					tv		tv	rare				tv	c	tv, wv	c, oc	Apr.	
American scaup duck				tv, wv	c, fc		May 5, 18			tv			tv		tv	fc	Apr. 7	Aug. 21, Sept. 20	Nov. 29	tv	c	tv	rare	Apr.	
Lesser scaup duck	tv	unc		tv, wv	c, oc	Apr. 7	May 16	Oct. 12		tv			tv		tv	fc				tv	oc	tv, wv	c		May
Ring-necked duck																				wv	c				
American golden-eye	wv	c		wv	c		Apr. 6	Oct. 29		tv, wv	c, fc		tv, wv	c	wv	ab				wv	once, Nov. '04	tv	fc		
Barrow golden-eye																				tv	fc	wv, tv	fc		Apr. 6
Bufflehead	tv	c		tv, wv	fc, oc	Apr. 21				tv	fc		tv	fc	tv	c				wv	c				
Old squaw	tv	c	Apr. 1, 7	tv, wv	fc		Apr. 26			wv	fc		tv		wv	oc									
Harlequin duck																						av			
Labrador duck																									
American eider																				wv	rare	tv, wv	rare		
King eider				wv	once								tv							tv		tv, wv	fc		
American scoter	tv	rare								tv			tv							tv		tv, wv	c		Apr. 4
White-winged scoter				tv	c					tv					tv	oc				tv	fc	tv	c	Mar. 14	
Surf scoter													tv							tv					
Ruddy duck	tv	oc		tv	unc				Oct. 19	tv												tv	rare	8 Apr. '82	
Lesser snow goose													tv	once, 19 Nov. '81											
Greater snow goose	tv	once, 1888		tv	rare	Mar. '76																			
Blue goose																						tv	c	Mar. 1, 14, 25	
Am. white-fronted goose													tv	c						tv	fc				
Canada goose	tv	fc		tv, wv	c, oc	Mar. 13, 23		Oct.		tv					tv		Mar.					av			
Hutchins goose															av		Apr.								
White bellied brant																									
Black brant																						tv	rare		
Barnacle goose																				tv	rare				
Whistling swan															tv	rare									
Trumpeter swan																									
White ibis																									
Glossy ibis																									
White-faced glossy ibis																									

SPECIES RECORDED	WESTCHESTER (*continued*)			WYOMING	
	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare
Holboell grebe	Oct.	Dec.			
Horned grebe	Oct.	Dec.	yes	tv	
Pied-billed grebe	Sept. 3	Oct. 15	yes	tv, sr.	
Loon				tv	
Black-throated loon					
Red-throated loon	Oct. 17				
Puffin					
Black guillemot					
Brünnich murre	11 Dec. '94				
Razor-billed auk					
Dovekie	5 Dec. '98				
Skua					
Pomarine jæger	18 Oct. '77				
Parasitic jæger					
Long-tailed jæger					
Ivory gull					
Kittiwake					
Glaucous gull					
Iceland gull					
Kümlien gull					
Great black-backed gull					
Herring gull					
Ring-billed gull					
Laughing gull					
Bonaparte gull	Oct.				
Little gull					
Sabine gull					
Gull-billed tern					
Caspian tern					
Royal tern					
Cabot tern					
Trudeau tern					
Forster tern					
Common tern					
Arctic tern					
Roseate tern					
Least tern					
Sooty tern					
Black tern	Sept.				
Black skimmer					
Cory shearwater					
Greater shearwater					
Audubon shearwater					
Sooty shearwater					
Black-capped petrel					
Scaled petrel					
Leach petrel					
Wilson petrel					
Yellow-billed tropic-bird					
Booby					
Gannet					
Cormorant					
Double-crested cormorant					
American white pelican					
Brown pelican					
Man-o'-war bird					
American merganser					
Red-breasted merganser	Nov.				
Hooded merganser					
Mallard	Oct.				
Black duck	Nov.				
Gadwall					
Widgeon					
Baldpate	Oct. 4	Oct. 28			
European teal					
Green-winged teal	Sept. 11, 24	Oct. 17, 28			
Blue-winged teal	Sept. 24	Oct. 17			
Cinnamon teal					
Shoveler	Oct.				
Pintail	Sept. 26	Dec. 4			
Wood duck					
Rufous-crested duck					
Redhead	Oct. 12	Oct. 28			
Canvasback	Oct.				
American scaup duck	Oct. 4	Dec.			
Lesser scaup duck	Aug. 31, Sept. 15				
Ring-necked duck					
American golden-eye	Nov.				
Barrow golden-eye					
Buffle-head					
Old squaw	Dec. 4				
Harlequin duck					
Labrador duck					
American eider	14 Dec. '94				
King eider					
American scoter					
White-winged scoter					
Surf scoter	Oct. 7				
Ruddy duck	Oct. 5	Oct. 28			
Lesser snow goose					
Greater snow goose					
Blue goose					
Am. white-fronted goose					
Canada goose	Oct. 27				
Hutchins goose					
White-bellied brant					
Black brant					
Barnacle goose					
Whistling swan	Nov. '97			tv	oc, Apr. '75
Trumpeter swan					
White ibis					
Glossy ibis					
White-faced glossy ibis					

YATES

Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds
rare		Mar. 26	Dec. 31		
c	Apr. 8, 13	Apr. 29	Oct.	Nov. 22	
c, oc	Apr. 26		Sept. 11	Oct. 12, 22	May 12, 25
c	Apr. 4, 12, 17			Nov. 21	
rare					
rare			20 Dec. '96		
rare		Apr. 18			
c, fc		Apr. 25	Sept. 3		
oc					
unc	Apr. 17, 21	May 1, 13	Oct. 22		
oc			Aug	Sept	
c	May 22		Aug. 20, Sept. 6	Sept. 8, 21, 30	
rare			14 Aug. '86		
c, oc	Apr. 1	June 1			
oc					
c	Mar. 28	Apr. 13	Oct.	Nov.	
c, unc	Mar. 26, Apr. 2		Oct.		
b, oc	Mar. 13	May 13	Sept. 23, 26	Nov.	yes
c	Mar. 25				
unc			Sept. 24		
c	Apr. 29				
once	10 Apr. '85				
c	Apr. 7		Oct. 22		
c, local	Mar. 21, Apr. 1				Apr. 20, May 22
c, oc					
c, irreg		Mar. 19	Dec. 4		
c					
c		May 12			
c, fc		Apr. 15	Oct. 18		
c			Oct.		
c					
			Feb. '73		
unc					
unc					
rare			Oct. 6		
oc					
c	Mar. 10, 14, 25		Oct. 27		
rare	31 Mar. '88		1 Nov. '05		

SPECIES RECORDED	WESTCHESTER (*continued*)			WYOMING		YATES						
	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds
Holboell grebe	Oct.	Dec.				wv	rare		Mar. 26	Dec. 31		
Horned grebe	Oct.	Dec.	yes	tv		tv	c	Apr. 8, 13	Apr. 29	Oct.	Nov. 22	
Pied-billed grebe	Sept. 3	Oct. 15	yes	tv, sr		tv, sr	c, oc	Apr. 26		Sept. 11	Oct. 12, 22	May 12, 25
Loon				tv		tv	c	Apr. 4, 12, 17			Nov. 21	
Black-throated loon												
Red-throated loon	Oct. 17					tv	rare					
Puffin												
Black guillemot												
Brünnich murre	11 Dec. '94					wv	rare			20 Dec. '90		
Razor-billed auk												
Dovekie	5 Dec. '98											
Skua												
Pomarine jæger	18 Oct. '77											
Parasitic jæger												
Long-tailed jæger												
Ivory gull												
Kittiwake												
Glaucous gull												
Iceland gull												
Kumlien gull												
Great black-backed gull						tv	rare		Apr. 18			
Herring gull						tv, wv	c, fc		Apr. 25	Sept. 3		
Ring-billed gull						tv	oc					
Laughing gull												
Bonaparte gull	Oct.					tv	unc	Apr. 17, 21	May 1, 13	Oct. 22		
Little gull												
Sabine gull												
Gull-billed tern												
Caspian tern												
Royal tern												
Cabot tern												
Trudeau tern												
Forster tern												
Common tern						tv	oc			Aug.	Sept.	
Arctic tern												
Roseate tern						av						
Least tern												
Sooty tern												
Black tern	Sept.					tv	fc	May 22		Aug. 20, Sept. 6	Sept. 8, 21, 30	
Black skimmer												
Cory shearwater												
Greater shearwater												
Audubon shearwater												
Sooty shearwater												
Black-capped petrel												
Scaled petrel												
Leach petrel												
Wilson petrel												
Yellow-billed tropic-bird												
Booby												
Gannet												
Cormorant												
Double-crested cormorant						tv	rare			14 Aug. '86		
American white pelican												
Brown pelican												
Man-o'-war bird												
American merganser						tv, wv	fc, oc	Apr. 1	June 1			
Red-breasted merganser	Nov.					tv, wv	oc					
Hooded merganser						tv	fc	Mar. 28	Apr. 13	Oct.	Nov.	
Mallard	Oct.					tv, wv	c, unc	Mar. 26, Apr. 2		Oct.		
Black duck	Nov.					tv, res	ab, oc	Mar. 13	May 13	Sept. 23, 26	Nov.	yes
Gadwall												
Widgeon												
Baldpate	Oct. 4	Oct. 28				tv	fc	Mar. 25				
European teal												
Green-winged teal	Sept. 11, 24	Oct. 17, 28				tv	unc			Sept. 24		
Blue-winged teal	Sept. 24	Oct. 17				tv	c	Apr. 20				
Cinnamon teal						av	once	10 Apr. '85				
Shoveler	Oct.											
Pintail	Sept. 26	Dec. 4				tv	fc	Apr. 7		Oct. 22		
Wood duck						tv, sr	fc, local	Mar. 21, Apr. 1				Apr. 20, May 22
Rufous-crested duck												
Redhead	Oct. 12	Oct. 28				tv, wv	c, oc					
Canvasback	Oct.					tv, wv	c, irreg		Mar. 19	Dec. 4		
American scaup duck	Oct. 4	Dec.				tv	c					
Lesser scaup duck	Aug. 31, Sept. 15					tv	c		May 12			
Ring-necked duck												
American golden-eye	Nov.					tv, wv	fc		Apr. 15	Oct. 18		
Barrow golden-eye												
Buffle-head						tv	c					
Old squaw	Dec. 4					tv	c			Oct.		
Harlequin duck												
Labrador duck												
American eider	14 Dec. '04					av						
King eider										Feb. '73		
American scoter						tv	unc					
White-winged scoter						tv	unc					
Surf scoter	Oct. 7					tv	rare					
Ruddy duck	Oct. 5	Oct. 28				tv	oc			Oct. 6		
Lesser snow goose												
Greater snow goose												
Blue goose												
Am. white-fronted goose												
Canada goose	Oct. 27					tv	c	Mar. 12, 14, 25		Oct. 27		
Hutchins goose												
White-bellied brant												
Black brant												
Barnacle goose												
Whistling swan	Nov. '97				tv		oc, Apr. '75	tv	rare	31 Mar. '88		1 Nov. '05	
Trumpeter swan												
White ibis												
Glossy ibis												
White-faced glossy ibis												

SPECIES RECORDED	GIRAUD, LONG ISLAND, 1844							DE KAY, NEW YORK STATE, 1844
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient
Wood ibis								
American bittern	sr.	c						Appears in Apr. Leaves in Oct. Breeds
Least bittern	sr.	fc					yes	Found throughout State. Breeds. Arrives early in May
Great blue heron		c						Common species. Breeds
American egret	sv	unc						Middle of May till early autumn. Breeds?
Snowy heron	sr.	c	spring, late			Sept. 30		Often seen on coast. Breeds? May to Sept
Louisiana heron	sv	once, 1836						Accidental visitor
Little blue heron	sv	rare						Rare visitor
Green heron	sr.	c	Apr. 15					Common throughout State. May to Oct. Breeds
Black-crowned night heron	sr.	c	Apr., early			fall, late		Early Apr. till late autumn. Breeds
Yellow-crowned night heron		rare						Rare in this State
Whooping crane								Will doubtless be obtained here
Sandhill crane								(Confused with Whooping crane)
King rail		once						Very rare
Clapper rail	sr.	ab, irreg	Apr. 30			Oct. 1	May 25	Very abundant on coast. Apr. to Oct. Breeds
Virginia rail		occurs	Apr., early					May to Sept. chiefly on fresh water, throughout State
Sora	tv	unc	spring			Oct., early		Appears sparingly. Breeds
Yellow rail		unc						Little observed
Black rail								
Corn crake								
Purple gallinule		very rare						
Florida gallinule		unc						Rare visitor from south
American coot		c						Mar. to Nov. Breeds?
Red phalarope		rare						Appears sparingly on coast. June & Sept
Northern phalarope		rare						Exceedingly rare
Wilson phalarope		rare						Very rare. Buffalo & L. I
American avocet	straggler	oc						Scarce on shores of this State. May to Nov. Breeds?
Black-necked stilt	straggler	unc						Not very common. Breeds?
American woodcock	sr.		Mar., early				Apr., early	Breeds throughout State. Early March till Jan
Wilson snipe	tv.	c	Mar., early		Sept	fall, late	(?)	Apr. to winter. Breeds
Dowitcher	tv.		Apr., late	May	July 15	Sept., late		Migrant. From south, Apr. From north, July in great numbe
Long-billed dowitcher								
Stilt sandpiper		unc						Rare. May, July, Aug., Sept
Knot	tv	c			Aug. 15	Sept., late		Appears in May. Returns in large flocks Aug. to Oct
Purple sandpiper		very rare						Specimen obtained on L. I. in June. Rare
Pectoral sandpiper	tv.	ab			Aug., late			Few in spring. Greatest numbers in Aug. & Sept
White-rumped sandpiper		unc						(Schinz's sandpiper). Not very abundant. Migrant
Baird sandpiper								
Least sandpiper	tv.	c	spring, early			Oct		Except during breeding season resident on coast
Dunlin								
Red-backed sandpiper	tv.	c	Apr		Sept	Nov		(Black-breasted sandpiper). Common on coast, Apr. & autu
Curlew sandpiper		unc						Rare northern species. July & Sept
Semipalmated sandpiper	tv.	ab	spring			fall, late		Common along seaboard & Great Lakes. May & Aug. Bre
Western sandpiper								
Sanderling	tv.	ab, fall			Aug. 15			Small numbers in May. Large flocks in Aug. & Nov
Marbled godwit	tv.	unc	May					Migrant. May. Aug. to Nov. in large flocks
Hudsonian godwit	tv.	unc						Less common than the preceding
Greater yellow-legs	tv.	fc	Apr. 20		Aug. 20	Nov		Migrant. May. Aug. till Dec
Yellow-legs		c	May, early			Sept		May, Aug. & Sept. Many breed
Solitary sandpiper	sr.	fc	May			Sept		May till Sept
Willet	sr.	fc	May				(?)	May to Nov. Many remain to breed
Ruff								
Bartramian sandpiper	sr.	c, local				Aug., Sept		Breeds through interior. Leaves in Sept
Buff-breasted sandpiper		unc						Not common here
Spotted sandpiper	sr.	c	Apr. 15			fall, late		Along every stream. Apr. till Nov
Long-billed curlew	sv, tv					Nov. 15		Abundant on coast. May, Aug. & Sept
Hudsonian curlew	tv.		May	June, early	Aug., late	Oct. 15		(Jack curlew). May, Aug., Sept. Less common than Sickle
Eskimo curlew	tv.				Aug., late	Nov. 1		Fall migrant. Aug. to Nov
European curlew								
Lapwing								
Black-bellied plover	tv.	ab	May, early	May	Aug	Sept., late		(Whistling plover). Migrant. May & Sept
American golden plover	tv.	ab., local	Apr., late	May	Sept, early	Sept		Straggling migrant in late Apr. & May. Large flocks on L. I. in
Killdeer	sr.	fc					yes	Resident. Summer in interior. Winter, on coast
Semipalmated plover	tv.		May		Aug., late	fall, late		Migrant. May. Aug. to Nov
Piping plover	sr.	c, locally					yes	Common along shores. Apr. to Oct. Breeds
Wilson plover		unc						Rare on coast. Breeds
Turnstone	tv.	unc	Apr., early	May, late	Sept	fall, late		Migrant. Apr. & May. Sept. to Nov
American oyster catcher	sr.	unc				fall		Not very common on coast
Bobwhite		ab					June	Occurs in every part of State. Breeds
Canada grouse								Yet common in northern counties
Ruffed grouse	res.	fc					May, early	Constant resident. Breeds in every part of State
Canadian ruffed grouse								
Willow ptarmigan								
Heath hen		nearly extinct					May 1	Almost entirely extirpated. One from L. I. in 1840
Wild turkey								Now only in Sullivan, Rockland, Orange, Allegany, Cattaraugus
Ring-necked pheasant								
Passenger pigeon		occurs						At all seasons in almost incredible numbers. Breeds
Mourning dove	sr.					fall	May 15	Apr. to Sept. Breeds
Ground dove								
Turkey vulture	straggler	rare						Occasional summer visitor. L. I. & Hudson valley
Black vulture								
Swallow-tailed kite		once, 1837						Accidental visitor near N. Y
Marsh hawk	res.	fc						Constant resident
Sharp-shinned hawk		fc						(Slate-colored hawk). Occurs
Cooper hawk	sr.	fc					(?)	Breeds in the mountainous districts
American goshawk		rare, 1838						Breeding at Niagara. *Audubon*
Red-tailed hawk	res.							Resident
Red-shouldered hawk	wv	fc						Rarely passes this State
Swainson hawk								
Broad-winged hawk		very rare						Rare. Several killed in one day in Rockland county
American rough-legged hawk		unc						Rare except in autumn & winter
Golden eagle		very rare						Rare. Frequently near Highlands, Islip, L. I
Bald eagle	wv	ab						Sometimes in flocks of 15–20, on coast. Breeds near N. Y
White gyrfalcon								
Gyrfalcon								
Black gyrfalcon								
Duck hawk	well known							Frequently taken. Breeds?
Pigeon hawk		fc						Not uncommon. More numerous in autumn
American sparrow hawk	tv, sr.	fc, unc	spring					Common. Breeds. A few pass the winter
American osprey	sr.	ab	Mar., late				yes	In every part of State. Breeds
American barn owl								May expect to find it in this State
American long-eared owl	wv							In remote woods in winter
Short-eared owl	wv	unc						Found in all States

WRENCE, NEW K AND VICINITY, 1866	ROOSEVELT & MINOT, FRANKLIN COUNTY, 1877	MEARNS, HUDSON HIGHLANDS, 1879–1890							RATHBUN, CENTRAL NEW YORK, 1879		
Occurs	Common or rare	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south
	oc	tv						(?)	sr	c	
			once						sr	c	
	rare	tv, sr	ab, oc	Apr. 4–21			Sept. 20–25	(?)	sr	c	Apr. 8
		sv	4 times							rare	
		sr	ab	Apr. 22, May 15			Oct.	May 22	sr	c	May 10
		sr						large heronry		rare	
			oc, fall								
		sr						yes	sr	c	Apr. 23
		sr						yes	sr	c	
										rare	20 Sept. '72
										rare	spring '70, '72
		sr							sr	c	May
		tv	ab						sr, tv	unc, c	
										rare	May '74, June '77
										rare	
	once, July	sr	very ab	Mar., early			Nov., late	yes	sr	c	
ive Apr. 20		tv	c		Apr. 19				tv	c	Apr
ive Mar. 20											
										rare	
									wv	rare	
									tv	fc	
									tv	c	
									tv	fc	
		tv				25 Sept. '79			tv	c	
									tv	c	
									tv	rare	
									tv	rare	June '76
		tv							tv	c	
		tv	oc						tv	ab	
		tv	ab	Apr. 25	May 24	July 6–20	Sept. 25, Oct. 15		tv	c	May 8
									sr	fc	
	occurs	sr	c	Apr. 19–30			Oct.	yes	sr	c	May 5
									tv	rare	
									tv	irreg	
									tv	rare	
		tv, fall							tv	c	
		tv	rare						sr	c	Mar. 16
									tv	c	
										rare, fall '76	
										rare, spring '68	
									tv	unc	
		res						yes	res	c, Seneca & Wayne	
	fc, local										
	fc	res	ab					yes	res	c	
	probably	res, wv	rare					few	sr	c, migration	Mar. 11
		res, wv	oc					yes	sr	fc	Mar. 18, Apr
		res	ab					yes	sr	c	
	seen	res	ab					yes	res	fc	
	seen	sr, wv	ab					May 2–10	sr, wv	c, oc	
	seen, June	wv, tv			Apr. 28				wv	unc	
	seen	res	ab					yes	res	c	
		res	ab					yes	sr, wv	c, rare	
	shot, Aug. 24	res, wv	oc	Mar.				May 8	sr	rare	
		tv	rare							rare	
		tv, wv	oc, oc					yes			
	rare	res						yes	res		
winter of 1856											
ut well known		res						yes		rare, winter '78	
		tv	unc							fc	
		res, tv	rare, ab, oc						sr, wv	c, rare	
	rare, breeds	tv, sr	c, oc					yes	sr		
										rare	
		res	ab					yes	res	fc	
		tv	oc						res	unc	

SPECIES RECORDED	GIRAUD, LONG ISLAND, 1844							DE KAY, NEW YORK STATE, 1844	LAWRENCE, NEW YORK AND VICINITY, 1866	ROOSEVELT & MINOT, FRANKLIN COUNTY, 1877	MEARNS, HUDSON HIGHLANDS, 1879–1890							RATHBUN, CENTRAL NEW YORK, 1879		
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Occurs	Common or rare	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south
Wood ibis																				
American bittern	sr	c						Appears in Apr. Leaves in Oct. Breeds	x	oc	tv						(?)	sr	c	
Least bittern	sr	fc					yes	Found throughout State. Breeds. Arrives early in May	x			once						sr	c	
Great blue heron		c						Common species. Breeds	x	rare	tv, sr	ab, oc	Apr. 4–21			Sept. 20–25	(?)	sr	c	Apr. 8
American egret	sv	unc						Middle of May till early autumn. Breeds?	x		sv	4 times							rare	
Snowy heron	sr	c	spring, late			Sept. 30		Often seen on coast. Breeds? May to Sept.	x											
Louisiana heron	sv	once, 1836						Accidental visitor	x											
Little blue heron	sv	rare						Rare visitor	x											
Green heron	sr	c	Apr. 15					Common throughout State. May to Oct. Breeds	x		sr	ab	Apr. 22, May 15			Oct.	May 22	sr	c	May 10
Black-crowned night heron	sr	c	Apr., early			fall, late		Early Apr. till late autumn. Breeds	x		sr						large heronry		rare	
Yellow-crowned night heron		rare						Rare in this State	x											
Whooping crane								Will doubtless be obtained here												
Sandhill crane								(Confused with Whooping crane)												
King rail		once						Very rare	x											
Clapper rail	sr	ab, irreg	Apr. 30			Oct. 1	May 25	Very abundant on coast. Apr. to Oct. Breeds	x			oc, fall								
Virginia rail		occurs	Apr., early					May to Sept. chiefly on fresh water, throughout State	x		sr						yes	sr	c	Apr. 23
Sora	tv	unc	spring			Oct., early		Appears sparingly. Breeds	x		sr						yes	sr	c	
Yellow rail		unc						Little observed	x										rare	20 Sept. '72
Black rail																			rare	spring '70, '72
Corn crake																				
Purple gallinule		very rare							x											
Florida gallinule		unc						Rare visitor from south	x		sr							sr	c	May
American coot		c						Mar. to Nov. Breeds?	x		tv	ab						sr, tv	unc, c	
Red phalarope		rare						Appears sparingly on coast. June & Sept	x											
Northern phalarope		rare						Exceedingly rare	x										rare	May '74, June '77
Wilson phalarope		rare						Very rare. Buffalo & L. I	x										rare	
American avocet	straggler	oc						Scarce on shores of this State. May to Nov. Breeds?	x											
Black-necked stilt	straggler	unc						Not very common. Breeds?	x											
American woodcock	sr		Mar., early				Apr., early	Breeds throughout State. Early March till Jan	x	once, July	sr	very ab	Mar., early			Nov., late	yes	sr	c	
Wilson snipe	tv	c	Mar., early		Sept	fall, late	(?)	Apr. to winter. Breeds	x		tv	c		Apr. 19				tv	c	Apr.
Dowitcher	tv		Apr., late	May	July 15	Sept., late		Migrant. From south, Apr. From north, July in great numbers	x, arrive Apr. 20											
Long-billed dowitcher									x, arrive Mar. 20											
Stilt sandpiper		unc						Rare. May, July, Aug., Sept	x											
Knot	tv	c			Aug. 15	Sept., late		Appears in May. Returns in large flocks Aug. to Oct	x										rare	
Purple sandpiper		very rare						Specimen obtained on L. I. in June. Rare	x									wv	rare	
Pectoral sandpiper	tv	ab			Aug., late			Few in spring. Greatest numbers in Aug & Sept	x									tv	fc	
White-rumped sandpiper		unc						(Schinz's sandpiper). Not very abundant. Migrant	x											
Baird sandpiper																				
Least sandpiper	tv	c	spring, early			Oct		Except during breeding season resident on coast	x									tv	c	
Dunlin																				
Red-backed sandpiper	tv	c	Apr		Sept	Nov		(Black-breasted sandpiper). Common on coast, Apr. & autumn	x									tv	fc	
Curlew sandpiper		unc						Rare northern species. July & Sept	x											
Semipalmated sandpiper	tv	ab	spring			fall, late		Common along seaboard & Great Lakes. May & Aug. Breeds?	x		tv				25 Sept. '70			tv	c	
Western sandpiper																				
Sanderling	tv	ab, fall			Aug. 15			Small numbers in May. Large flocks in Aug. & Nov	x									tv	c	
Marbled godwit	tv	unc	May					Migrant. May. Aug. to Nov. in large flocks	x									tv	rare	
Hudsonian godwit	tv	unc						Less common than the preceding	x									tv	rare	June '76
Greater yellow-legs	tv	fc	Apr. 20		Aug. 20	Nov		Migrant. May. Aug. till Dec	x		tv							tv	c	
Yellow-legs			May, early			Sept		May, Aug. & Sept. Many breed	x		tv	oc						tv	ab	
Solitary sandpiper	sr	fc	May			Sept		May till Sept	x		tv	ab	Apr. 25	May 24	July 6–20	Sept. 25, Oct. 15		tv	c	May 8
Willet	sr	fc	May				(?)	May to Nov. Many remain to breed	x											
Ruff									x											
Bartramian sandpiper	sr	c, local				Aug., Sept		Breeds through interior. Leaves in Sept	x									r	fc	
Buff-breasted sandpiper		unc						Not common here	x											
Spotted sandpiper	sr	c	Apr. 15			fall, late		Along every stream. Apr. till Nov	x	occurs	sr	c	Apr. 19–30			Oct.	yes	r	c	May 5
Long-billed curlew	tv, tv					Nov. 15		Abundant on coast. May, Aug. & Sept	x									tv	rare	
Hudsonian curlew	tv		May	June, early	Aug., late	Oct. 15		(Jack curlew). May, Aug., Sept. Less common than Sickle-bill	x									tv	rare	
Eskimo curlew	tv				Aug., late	Nov. 1		Fall migrant. Aug. to Nov	x											
Long-bill curlew																				
Lapwing									x									tv	rare	
Black-bellied plover	tv	ab	May, early	May	Aug	Sept., late		(Whistling plover). Migrant. May & Sept	x									tv		
American golden plover	tv	ab, local	Apr., late	May	Sept, early	Sept		Straggling migrant in late Apr. & May. Large flocks on L. I. in Sept	x		tv, fall							tr		Mar. 10
Killdeer	sr	fc					yes	Resident. Summer in interior. Winter, on coast	x		tv	rare						tv		
Semipalmated plover	tv		May		Aug., late	fall, late		Migrant. May. Aug. to Nov	x										rare, fall '76	
Piping plover	sr	locally					yes	Common along shores. Apr. to Oct. Breeds	x										rare, spring '78	
Wilson plover		unc						Rare on coast. Breeds	x									tv	unc	
Turnstone	tv	unc	Apr., early	May, late	Sept	fall, late		Migrant. Apr. & May. Sept. to Nov	x											
American oyster catcher	sr	unc				fall		Not very common on coast	x								yes	res	c, Seneca & Wayne	
Bobwhite		ab					June	Occurs in every part of State. Breeds	x		res									
Canada grouse								Yet common in northern counties	x	fc, local							yes	r		
Ruffed grouse	res	fc					May, early	Constant resident. Breeds in every part of State	x	fc	res	ab								
Canadian ruffed grouse																				
Willow ptarmigan																				
Heath hen		nearly extinct							x											
Wild turkey							May 1	Almost entirely extirpated. One from L. I. in 1840	x											
Ring-necked pheasant								Now only in Sullivan, Rockland, Orange, Allegany, Cattaraugus	x											
Passenger pigeon		occurs							x								few	sr	c, migration	Mar. 11
Mourning dove	sr							At all seasons in almost incredible numbers. Breeds	x	probably	res, wv	rare					yes	sr	fc	Mar. 18, Apr.
Ground dove						fall	May 15	Apr. to Sept. Breeds	x		res, wv	oc								
Turkey vulture	straggler	rare							irreg											
Black vulture								Occasional summer visitor. L. I. & Hudson valley	x											
Swallow-tailed kite		once, 1837							x											
Marsh hawk	res	fc						Accidental visitor near N. Y	x								yes	sr	c	
Sharp-shinned hawk		fc						Constant resident	x		res	ab					res	r	fc	
Cooper's hawk	sr	fc						(Slate-colored hawk.). Occurs	x	seen	res	ab					May 2–10	sr, wv	c, oc	
American goshawk		rare, 1838					(?)	Breeds in the mountainous districts	x	seen	sr, wv	ab						wv	unc	
Red-tailed hawk	res							Breeding at Niagara. *Audubon*	x	seen, June	wv, tv	ab	Apr. 28				yes	res	c	
Red-shouldered hawk	wv	fc						Resident	x	seen	res	ab					yes	sr, wv	c, rare	
Swainson's hawk								Rarely passes this State	x		res	ab								
Broad-winged hawk		very rare							x								May 8	sr	rare	
American rough-legged hawk		unc						Rare. Several killed in one day in Rockland county	x	shot, Aug. 24	res, wv	oc	Mar						rare	
Golden eagle		very rare						Rare except in autumn & winter	x		tv	rare					yes			
Bald eagle	wv	ab						Rare. Frequently near Highlands, Islip, L. I	x		tv, wv	oc, oc					yes	res		
White gyrfalcon								Sometimes in flocks of 15–20, on coast. Breeds near N. Y	fc	rare	res									
Gyrfalcon																				
Black gyrfalcon									rare, winter of 1856								yes			
Duck hawk	well known																		rare, winter '78	
Pigeon hawk		fc						Frequently taken. Breeds?	unc, but well known										fc	
American sparrow hawk	tv, sr	fc unc	spring					Not uncommon. More numerous in autumn	x		res							sr, wv	c, rare	
American osprey	sr	ab	Mar., late					Common. Breeds. A few pass the winter	x		tv	unc					yes	sr		
American barn owl							yes	In every part of State. Breeds	x		res, tv	rare, ab, oc							rare	
American long-eared owl	wv							May expect to find it in this State	rare	rare, breeds	tv, sr	c, oc					yes	res	fc	
Short-eared owl	wv	unc						In remote woods in winter	x									res	unc	
								Found in all States	res, fc		res	ab								
											tv	oc								

SPECIES RECORDED	RATHBUN, CENTRAL NEW YORK, 1879 (*continued*)		MERRIAM, ADIRONDACK REGION, 1881–1884				BICKNELL, CATSKILLS, 1882			LANGILLE, OUR BIRDS			
	Departs for south	Breeds	Resident or transient	Common or rare	Returns from north	Breeds	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Arrives from south	Leave for north
Wood ibis													
American bittern		yes		not rare		yes				sr		Apr.	
Least bittern		yes								sr			
Great blue heron		yes	sr	c		yes	sr, local			sr			
American egret				once, 1883									
Snowy heron													
Louisiana heron													
Little blue heron													
Green heron	Sept. 30	yes	sr	rare		yes							
Black-crowned night heron				once									
Yellow-crowned night heron													
Whooping crane													
Sandhill crane													
King rail										sr	local		
Clapper rail													
Virginia rail		yes		fc, local						sr	fc	Apr. 25	
Sora		yes		local		yes				sr	c	Apr.	
Yellow rail											oc		
Black rail													
Corn crake													
Purple gallinule													
Florida gallinule	Sept.	yes								sr	c	Apr.	
American coot				rather rare		yes				tv	fc	Apr.	
Red phalarope													
Northern phalarope													
Wilson phalarope										tv	oc, fall		
American avocet													
Black-necked stilt													
American woodcock		yes		rather rare		yes	sr		yes	sr		Apr. 1	
Wilson snipe	Nov.			once	Oct. 7						c	Apr.	
Dowitcher	Sept. '75									tv			
Long-billed dowitcher													
Stilt sandpiper	Oct. '75												
Knot	15 Oct. '74		tv										
Purple sandpiper													
Pectoral sandpiper										tv			
White-rumped sandpiper													
Baird sandpiper													
Least sandpiper			tv	local, very ab, fall						tv	c	Apr. 25	
Dunlin													
Red-backed sandpiper			tv										
Curlew sandpiper													
Semipalmated sandpiper										tv	c		
Western sandpiper													
Sanderling				once	5 Oct. '81					tv			
Marbled godwit				fc, local						tv	oc		
Hudsonian godwit													
Greater yellow-legs	Aug.		tv							tv	c	Apr.	May 1
Yellow-legs				once	9 June '78					tv	fc		
Solitary sandpiper			sr	not very c						tv			
Willet										tv	oc		
Ruff													
Bartramian sandpiper			sr	local		yes				sr	local	Apr. 25	
Buff-breasted sandpiper													
Spotted sandpiper		yes	sr	fc			sr	c	May 31	sr	c	Apr. 15, 20	
Long-billed curlew				once									
Hudsonian curlew													
Esquimaux curlew													
European curlew													
Lapwing													
Black-bellied plover			tv	local						tv	fc		June
American golden plover				c, local	Oct.					tv	c, fall	Apr. 20	May 10
Killdeer	Oct. 30	yes	tv							sr	c	Mar.	
Semipalmated plover			tv	ab, local	Sept. 15					tv	ab		
Piping plover													
Wilson plover													
Turnstone										tv	unc		
American oyster catcher													
Bobwhite		yes					res	local	yes	res	rare now		
Canada grouse			res	fc, local									
Ruffed grouse		yes	res	c			res	c	yes	res			
Canadian ruffed grouse													
Willow ptarmigan				once, 22 May '76									
Heath hen													
Wild turkey													
Ring-necked pheasant													
Passenger pigeon		yes		irreg		yes		once, 1882					
Mourning dove		yes		local		yes	sr	on edges		sr	c		
Ground dove													
Turkey vulture													
Black vulture													
Swallow-tailed kite													
Marsh hawk		yes		occurs						sr		Apr.	
Sharp-shinned hawk				c		yes	sr			sr, res	fc, oc	Apr. 20	
Cooper hawk		res		fc		res				sr			
American goshawk			res	rare									
Red-tailed hawk		yes		fc		yes	sr			res	c		
Red-shouldered hawk		yes		unc		yes					rare		
Swainson hawk													
Broad-winged hawk		Apr. 25	sr	fc		yes					c		
American rough-legged hawk	Nov. 8		tv	unc						tv	oc	Apr. 20	
Golden eagle				rare				oc					
Bald eagle		yes		not rare		local	res	unc		res	c, local		
White gyrfalcon													
Gyrfalcon													
Black gyrfalcon													
Duck hawk										tv	oc		
Pigeon hawk	Aug. 31			rather rare		(?)				tv		Apr.	
American sparrow hawk		yes		unc		yes				sr	c	Mar., Apr. 15	
American osprey		yes	sr	fc				oc					
American barn owl										once			
American long-eared owl				unc		yes				res	c, local		
Short-eared owl				twice							local		

HAUNTS, 1884			EDSON, CHAUTAUQUA COUNTY, 1886			BARNUM, ONONDAGA COUNTY, 1886				RALPH AND BAGG, ONEIDA COUNTY, 1886–1900			
urns om rth	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Resident or transient	Common or rare	Arrives from south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north
	Oct.		tv	fc	spring	sr	c			sr	c		
		May 25, June				sr	fc		yes		oc	30 May '92	
			sr	fc	Apr. 1	sr	ab	Mar. 25	yes	sr	c		
							rare			straggler	3 times		
			sr	c		sr	c		yes	sr	c		
						sr	fc				oc		
											once, 1873		
	Oct.	yes	tv	c		sr	c		yes	sr	fc		
	Oct. 20	May 25	tv	ab						sr			
											once		
	Oct.	yes									oc		
	Oct.			fc		tv	fc				c		
											once		
						tv	rare			tv	twice		
						tv	rare, Oct. 6				once		
		Apr. 20		fc		sr	c	Apr. 29	yes	sr	c		
				fc		tv	c	Apr. 8	yes (?)	tv	c		
3										tv	twice		
						tv	c				once		
3	Oct. 15					tv	c			tv	fc		
						tv	rare			tv	oc		
											oc		
, Aug.	Oct.					tv	c			tv	c		
										tv	c		
, Aug.						tv	c			tv	c		
										tv	c		
								June '76					
						tv	rare, 13 Oct. '83				twice		
	Nov. 1			rare		tv	c			tv	fc		
				unc		tv	c			tv	c		
				rare		tv	fc			tv	c		May 15
		May 20				tv	rare			sr	fc		
		May 25, June	sr	c	Apr	sr	ab		yes	sr	c		
											once		
						tv	c				once		
							3, 1873						
				rare						tv	3 records		
				rare		tv	c			tv	c		
		May	sr	c	Apr	sr	c	Apr. 9	es	sr	c		
						tv	c			tv	c		
											nce, 1880		
						tv	nc	30 May '81			nce		
			former res				rare			res	rare, local		
											nce		
		yes	res	c		res	c		yes	res	c		
											nce		22 May '76
			former res										
				unc		tv	fc	Apr. 29		tv	c, formerly		
		May 20	sr, local			sr	c	Apr. 1	yes		c, local		
											twice	May '79	
		May, June	sr	rare		sr	c		yes		unc		
		May		fc		sr	c				c		
		May		unc		sr	c	Apr. 14	yes		fc, local		
						tv	rare			res	fc		
		Mar. 27	sr	fc		sr	ab	Mar. 29	yes		c		
			sr	fc		sr	ab	Mar. 22	yes		ab		
				rare		sr	c		yes		unc		
						wv	c			tv	fc		
											twice	May '96	
			tv	fc		sr	c	Apr. 9	yes	res	c		
				rare									
	Oct.			rare		tv	c			tv			
		yes	sr	c		sr	ab	Apr. 14	yes	sr	c		
						tv	c				fc		
										straggler	once, Sept. '98		
						res	c		yes	res	c		
						res	c	Feb. 22	yes	tv	fc		

SPECIES RECORDED	RATHBUN, CENTRAL NEW YORK, 1879 (continued)		MERRIAM, ADIRONDACK REGION, 1881-1884				BICKNELL, CATSKILLS, 1882			LANGILLE, OUR BIRDS IN THEIR HAUNTS, 1884							BOSON, CHAUTAUQUA COUNTY, 1880			BARNUM, ONONDAGA COUNTY, 1886				RALPH AND BAGG, ONEIDA COUNTY, 1886-1903			
	Departs for south	Breeds	Resident or transient	Common or rare	Returns from north	Breeds	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Resident or transient	Common or rare	Arrives from south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north
Wood ibis																											
American bittern				not rare		yes				sr		Apr			Oct.		tv	fc	spring	sr				sr			
Least bittern										sr						May 25, June				r						[illegible] Mar '97	
Great blue heron			r	c		yes	sr, local			sr							sr	fc	Apr. 1	r	ab.	Mar 25		sr			
[illegible]				once, 1883																	rare			transient	3 times		
[illegible]																											
[illegible]																											
[illegible]																											
Green heron	Sept. 30	yes	r	rare		yes											r			r				r			
Black-crowned night heron				once																r							
Yellow-crowned night heron																											
Whooping crane																											
Sandhill crane																									[illegible], 1873		
King rail										sr	local																
[illegible]																											
[illegible]				local						sr	fc	Apr. 25			Oct.	yes	tv	c		r				r			
[illegible]				local		yes				sr	c	Apr.			Oct. 20	May 25	tv	ab.						r			
[illegible]											oc																
[illegible]																											
[illegible]																											
[illegible]																											
[illegible]	[illegible]									r	c	Apr.			Oct.												
[illegible]				rather rare		yes				tv	fc	Apr.			Oct.					tv	c						
[illegible]																											
[illegible]																				tv	rare			tv			
[illegible]										tv	oc, fall									tv	rare, Oct. [illegible]						
[illegible]																											
[illegible]																											
American [illegible]				rather rare		yes	sr		yes	sr		Apr. 1				Apr. 20				r		Apr. 20	yes	r			
Wilson snipe				[illegible]	Oct. 7						c	Apr.						fc		tv		Apr. 8					
Dowitcher										tv				[illegible] 28													
[illegible]																											
[illegible]	Oct. '75																										
[illegible]	15 Oct. '74		tv																	tv							
[illegible]										tv				[illegible] 28	Oct. 15												
[illegible]										tv		Apr. 25			Oct.												
[illegible]																											
Bartramian sandpiper			r							r																	
[illegible]																											
Spotted sandpiper			r				r			r		Apr. 15, 20															
Long-billed curlew																											
[illegible]								once, 1882 on edges																			
[illegible]																											

SPECIES RECORDED	RALPH & BAGG, ONEIDA COUNTY, 1886–1900 (*continued*)			DAVISON, NIAGARA COUNTY, 1889			BERGTOLD, BUFFALO & VICINITY			GREGG, CHEMUN COUNTY, 1891	
	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Breeds	Resident or transient	Comm or rare
Wood ibis											
American bittern					c	yes	tv	oc	yes	sr	
Least bittern					c	yes	tv	oc	yes	sr	
Great blue heron			yes		c			fc	yes	tv	c
American egret		10 Nov. '89			twice, 18 Aug. '86						
Snowy heron							av				
Louisiana heron											
Little blue heron											
Green heron			yes		c	yes		fc	yes	sr	c
Black-crowned night heron	12 Aug. '78						tv	rare			
Yellow-crowned night heron					rare		tv	rare			
Whooping crane											
Sandhill crane							av				
King rail								rare			
Clapper rail											
Virginia rail			yes		c	yes	tv	oc	yes		
Sora			yes		c	yes		fc	yes		occurs.
Yellow rail	3 Oct. '83				rare		tv	oc			
Black rail											
Corn crake											
Purple gallinule											
Florida gallinule				sr	rare			oc	yes		once
American coot				tv	c			c	yes	tv	c
Red phalarope	4 Oct. '89										
Northern phalarope	21 Sept. '89						tv	rare			
Wilson phalarope	6 Oct. '83										
American avocet							av				
Black-necked stilt											
American woodcock			yes		c	yes		fc	yes	res	
Wilson snipe				tv	c		tv	fc	yes	tv	c
Dowitcher		Sept. 22									rare
Long-billed dowitcher											
Stilt sandpiper											
Knot	26 Aug. '91						tv	rare			
Purple sandpiper				tv	rare		tv	rare			
Pectoral sandpiper							tv	c			
White-rumped sandpiper	Oct. 27, Nov. 3										
Baird sandpiper	Sept. 4				5 spec., 1898						
Least sandpiper	18 Sept. '88			tv	fc		tv	fc			
Dunlin					once, 1895						
Red-backed sandpiper	Oct. 5	Oct. 27					tv	rare			c, sprin
Curlew sandpiper											
Semipalmated sandpiper				tv	c		tv	oc			
Western sandpiper											
Sanderling				tv	c		tv	oc			
Marbled godwit											
Hudsonian godwit	7 Sept. '91										
Greater yellow-legs				tv	c		tv	fc			
Yellow-legs				tv	c		tv	fc		tv	c
Solitary sandpiper							tv	c		tv	c
Willet											
Ruff											
Bartramian sandpiper			yes	sr	fc	yes	tv	oc			c
Buff-breasted sandpiper				tv	once, 31 Aug. '86		av				
Spotted sandpiper			yes	sr	c	yes		c	yes		ab
Long-billed curlew	5 Oct. '80						tv	oc			
Hudsonian curlew	5 Sept. '99						tv	rare			
Eskimo curlew					once, 2 Oct. '79		tv	rare			
European curlew											
Lapwing											
Black-bellied plover	Sept. 5, 24, Oct. 8				once, 8 Sept. '99		tv	rare			
American golden plover				tv	c, fall		tv	c		tv	
Killdeer			yes		c	yes		c	yes	sr	
Semipalmated plover				tv	c		tv	fc			
Piping plover											
Wilson plover							tv	rare			
Turnstone				tv	rare		av				
American oyster catcher											
Bobwhite			yes		rare			rare	yes	res	
Canada grouse											
Ruffed grouse			yes		c	yes	res	fc	yes	res	c
Canadian ruffed grouse											
Willow ptarmigan											
Heath hen											
Wild turkey											
Ring-necked pheasant											
Passenger pigeon			yes		10 May '83			fc	yes		
Mourning dove					c	yes		fc	yes	sr	c
Ground dove											
Turkey vulture											
Black vulture							av	once			c
Swallow-tailed kite											
Marsh hawk					unc	yes		oc	yes	sr	c
Sharp-shinned hawk			May 18, June 7		c	yes		oc	yes		c
Cooper hawk			yes				tv	rare			c
American goshawk			9 May '98	wr	2 spec		wv	rare		tv	rare
Red-tailed hawk			yes		c	yes		fc	yes		c
Red-shouldered hawk			yes		unc	yes	res	oc	yes	breeds	c
Swainson hawk											
Broad-winged hawk			Apr. 24		rare			rare			
American rough-legged hawk				wv	rare		tv	rare			fc
Golden eagle	23 Oct. '85									res	unc
Bald eagle					unc	yes		oc	yes	sr	c
White gyrfalcon											
Gyrfalcon											
Black gyrfalcon											
Duck hawk			May 15					once			
Pigeon hawk	Sept. 12				c	yes		fc	yes	res. (?)	c
American sparrow hawk			yes		c	yes	res	c	yes		
American osprey				tv	unc			oc	yes		c
American barn owl					once			rare			
American long-eared owl			yes		unc		tv	oc			unc
Short-eared owl					c	yes	tv	fc		wv	unc

	CHAPMAN, NEW YORK AND VICINITY, 1894						SHORT, WESTERN NEW YORK, 1896			FISHER, SING SING, 1898		
ent ent	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Arrives from south
	unc.					May 10	sr.		yes	sr.	rare	Apr. 11
	c, local					May 31	sr.		yes	sr.	fc	
	local, c	Apr. 1-10			Nov. 1-30		sr.		yes	tv.	c	Apr. 4
	rare	Aug.			Sept. 30		av.	rare		av.		
	unc, reg									av.		
	unc											
	c	Apr. 20-30			Oct. 10-20	May 6	sr.		yes	sr.	c	Apr. 6
	c, local					May 1	av.	rare		sr.	c	Apr. 6
	once											
	rare					May 15						
	ab, oc					May 10				av.		
	c, local, rare					May 15	sr.		yes	sr.	fc	
	rare, c, fall					May 20	sr.		yes	tv.	c	May
	unc.							very rare				
	rare											
	3 records											
	2 records											
	rare						sr.		yes	sr.	rare	June 5
	fc, local						tv.	c	yes ?	tv.	c	Apr. 28
	rare											
	c											
	very rare, irreg											
	irreg											
	rare											
	fc	Mar. 10-20			Nov. 1-30	Apr. 1	sr.	c	yes	sr.	c	Feb. 19
	fc, oc	Mar. 20-31	May 1-10				tv.	c		tv.	fc	Mar. 20
	c	May 1		July 10	Aug. 15							
	rare, reg, fall											
	unc.			July 15	Sept. 15							
	c		May	July 15	Oct. 1							
	rare, reg			Aug.	Oct. 30							
	c						tv.	rare		tv.	rare	
	fc									tv.	oc	
	rare											
	ab		May	July 10	Sept. 1		tv.	c		tv.	fc	May 9
	once											
	ab		May	Sept. 1	Nov					tv.	fc, fall	
	oc											
	ab		May	July 10	Oct. 1		tv.	oc		tv.	c, fall	
	fc											
	ab		May	July 10	Oct.		tv.	oc		tv.	fc	
	rare, irreg, fall											
	irreg, fall											
	c	Apr. 20		July 20	Nov		tv.	c		tv.	c	
	ab, fall, rare, spring			July 15	Sept		tv.	fc		tv.	c, fall	
	fc	May 1-10	May 15-25	July			tv.	rare		tv.	c	May 3
	fall									av.		
	3											
	rare	Apr. 15				June 1	tv.	rare	yes, rarely			
	rare						tv.	rare				
	c	Apr. 20-30			Sept. 20-30	May 24	sr.	c	yes	sr.	c	Apr. 29
	rare, irreg, fall									av.		
	fc		May	July 15	Oct. 1		tv.	rare				
	rare						tv.	rare				
	once											
	c	Apr. 15	June 1	Aug. 1	Nov. 1		tv.	fc		av.		
	rare, spring; c, fall						tv.	c				
	rare, local, fc	Mar.			Nov	May 10	sr.	c	yes	tv.	rare, fall	
	ab		May	July 15	Oct. 1		tv.	oc		tv.	c, fall	
	rare, local	Apr.			Sept					av.		
	unc											
	c		May	Aug. 1	Sept		tv.			av.		
	rare, irreg											
	fc					May 26	res.	fc	yes	res.	c	
	unc					May 10	res.	c	yes	res.	c	
	formerly											
	formerly											
	very rare						tv, sr.	rare	yes	former, sr, tv.	rare, c	Apr. 15
	c, oc	Mar. 20-31			Nov. 1-30	Apr. 25	sr.	c	yes	sr, res.	c, oc	Mar. 3
	once											
	fc						tv.	rare, 18 July '91		av.		
	twice						tv.	rare, 28 May '92				
	4 times											
	c					May 20	sr.		yes	sr, wv.	fc, oc	Mar. 6, breeds.
	c, rare					May 21	sr.	fc	yes	res.	c	
	rare, fc					May 1	sr.	c	yes	res.	fc	
	rare						wv.	rare		wv.	rare	
	c					Apr. 1	sr.	c	yes	res.	c	
	c					Apr. 3		c	yes	res.	c	
	once						av.	1 Oct. '89				
	rather unc					May 5	sr.	fc	yes	sr.	fc	Mar. 15
	rare						wv.	c		av.		
	rare					formerly				av.		
	fc					L. I.	tv.	oc	yes, rare	res.	c	
	once											
	once											
	rare, fc					Mar. 30	tv.	rare			oc	
	c						tv.	c	yes, rare	tv.	fc	Apr. 1
	unc, ab					Apr. 25	sr.	c	yes	res.	rare	
	c, local					May 2	tv.	c		tv, sr.	c, rare	Apr. 3
	rare					Apr. 20				av.		
	unc					Apr. 1	tv.	oc	yes ?	res.	c	
	c						wv.	c	yes, rare ?		oc	

SPECIES RECORDED	RALPH & BAGG, ONEIDA COUNTY, 1886–1900 (*continued*)			DAVISON, NIAGARA COUNTY, 1889			BERGTOLD, BUFFALO & VICINITY			GREGG, CHEMUNG COUNTY, 1891		CHAPMAN, NEW YORK AND VICINITY, 1894							SHORT, WESTERN NEW YORK, 1896			FISHER, SING SING, 1898		
	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Arrives from south
Wood ibis																								
American bittern					c	yes	tv	oc	yes	sr		sr	unc					May 10	sr		yes	sr	rare	Apr. 11
Least bittern					c	yes	tv	oc	yes	sr		sr	c, local					May 31	sr		yes	sr	fc	
Great blue heron			yes		c			fc	yes	tv	c	sr, tv	local, c	Apr. 1-10			Nov. 1-30		sr		yes	tv	c	Apr. 4
American egret		10 Nov. '89			twice, 18 Aug. '86							sv	rare	Aug			Sept. 30		av	rare		av		
Snowy heron							av					av	unc, reg									av		
Louisiana heron																								
Little blue heron												sv	unc											
Green heron			yes		c	yes		fc	yes	sr	c	sr	c	Apr. 20-30			Oct. 10-20	May 6	sr		yes	sr	c	Apr. 6
Black-crowned night heron	12 Aug. '78						tv	rare				sr	c, local					May 1	av	rare		sr	c	Apr. 6
Yellow-crowned night heron					rare		tv	rare				av	once											
Whooping crane																								
Sandhill crane							av																	
King rail								rare				sr	rare					May 15						
Clapper rail												sr, wr	ab, oc					May 10				av		
Virginia rail			yes		c	yes	tv	oc	yes			sr, wr	c, local, rare					May 15	sr		yes	sr	fc	
Sora			yes		c	yes		fc	yes		occurs	sr, tv	rare, c, fall					May 20	sr		yes	tv	c	May
Yellow rail	3 Oct. '83				rare		tv	oc				tv	unc							very rare				
Black rail												sr	rare											
Corn crake												av	3 records											
Purple gallinule												av	2 records											
Florida gallinule				sr	rare			oc	yes		once	tv	rare						sr		yes	sr	rare	June 5
American coot				tv	c			c	yes	tv	c	tv, sr	fc, local						tv	c	yes ?	tv	c	Apr. 28
Red phalarope	4 Oct. '89											tv	rare											
Northern phalarope	21 Sept. '89						tv	rare				tv	c											
Wilson phalarope	6 Oct. '83											tv	very rare, irreg											
American avocet							av					tv	irreg											
Black-necked stilt												av	rare											
American woodcock			yes		c	yes		fc	yes	res		sr	fc	Mar. 10-20			Nov. 1-30	Apr. 1	sr	c	yes	sr	c	Feb. 19
Wilson snipe				tv	c		tv	fc	yes	tv	c	tv, wr	fc, oc	Mar. 20-31	May 1-10				tv	c		tv	fc	Mar. 20
Dowitcher		Sept. 22									rare	tv	c	May 1		July 10	Aug. 15							
Long-billed dowitcher												tv	rare, reg, fall											
Stilt sandpiper												tv	unc			July 15	Sept. 15							
Knot	26 Aug. '91						tv	rare				tv	c		May	July 15	Oct. 1							
Purple sandpiper				tv	rare		tv	rare				wr	rare, reg			Aug	Oct. 30							
Pectoral sandpiper							tv	c				tv	c						tv	rare		tv	rare	
White-rumped sandpiper	Oct. 27, Nov. 3											tv	fc									tv	oc	
Baird sandpiper	Sept. 4				5 spec., 1898							tv	rare											
Least sandpiper	18 Sept. '88			tv	fc		tv	fc				tv	ab		May	July 10	Sept. 1		tv	c		tv	fc	May 9
Dunlin					once, 1895							tv	once											
Red backed sandpiper	Oct. 5	Oct. 27					tv	rare			c, spring	tv	ab		May	Sept. 1	Nov					tv	fc, fall	
Curlew sandpiper												tv	oc											
Semipalmated sandpiper				tv	c		tv	oc				tv	ab		May	July 10	Oct. 1		tv	oc		tv	c, fall	
Western sandpiper												tv	fc											
Sanderling				tv	c		tv	oc				tv	ab		May	July 10	Oct.		tv	oc		tv	fc	
Marbled godwit												tv	rare, irreg, fall											
Hudsonian godwit	7 Sept. '91											tv	irreg, fall											
Greater yellow-legs				tv	c		tv	fc				tv	c	Apr. 20		July 20	Nov		tv	c		tv	c	
Yellow-legs				tv	c		tv	fc		tv	c	tv	ab, fall, rare, spring			July 15	Sept		tv	fc		tv	c, fall	
Solitary sandpiper							tv	c		tv	c	tv	fc	May 1-10	May 15-25	July			tv	rare		tv	c	May 3
Willet												tv	fall									av		
Ruff												av	3											
Bartramian sandpiper			yes	sr	fc	yes	tv	oc			c	sr, tv	rare	Apr. 15				June 1	tv	rare	yes, rarely			
Buff-breasted sandpiper				tv	once, 31 Aug. '86		av					tv	rare						tv	rare				
Spotted sandpiper			yes	sr	c	yes		c	yes		ab	sr	c	Apr. 20-30			Sept. 20-30	May 24	sr	c	yes	sr	c	Apr. 29
Long billed curlew	5 Oct. '80						tv	oc				tv	rare, irreg, fall									av		
Hudsonian curlew	5 Sept. '99						tv	rare				tv	fc		May	July 15	Oct. 1		tv	rare				
Eskimo curlew					once, 2 Oct. '79		tv	rare				tv	rare						tv	rare				
European curlew													once											
Lapwing												av	c	Apr. 15	June 1	Aug. 1	Nov. 1		tv	fc		av		
Black-bellied plover	Sept 5, 24, Oct. 8				once, 8 Sept. '99		tv	rare				tv	rare, spring; c, fall						tv	c				
American golden plover				tv	c, fall		tv	c		tv		sr, tv	rare, local, fc	Mar			Nov	May 10	sr	c	yes	tv	rare, fall	
Killdeer			yes		c	yes		c	yes	sr		tv	ab		May	July 15	Oct. 1		tv	oc		tv	c, fall	
Semipalmated plover				tv	c		tv	fc				sr	rare, local	Apr			Sept					av		
Piping plover												sv	unc									av		
Wilson plover							tv	rare				tv	c		May	Aug. 1	Sept		tv					
Turnstone							av					sv	rare, irreg											
American oyster catcher				tv	rare							tv	fc					May 26	res	fc	yes	res	c	
Bobwhite			yes					rare	yes	res		res									yes	res	c	
Canada grouse					rare								unc					May 10	res	c	yes			
Ruffed grouse			yes																					
Canadian ruffed grouse					c	yes	res	fc	yes	res														
Willow ptarmigan																								
Heath hen													formerly											
Wild turkey													formerly											
Ring-necked pheasant																								
Passenger pigeon			yes									tv							tv, sr	rare	yes	former, sr, tv	rare, c	Apr. 15
Mourning dove					to May '83			fc	yes			sr, wr	very rare						sr	c	yes	sr, res	c, oc	Mar. 3
Ground dove					c	yes		fc	yes	sr	c	av	c, oc	Mar. 20-31			Nov. 1-30	Apr. 25						
Turkey vulture												sv	once						tv	rare, 18 July '91		av		
Black vulture												av	fc						tv	rare, 28 May '92				
Swallow-tailed kite							av	once			c	av	twice								yes	sr, wv	fc, oc	Mar. 6, breeds
Marsh hawk												res	4 times					May 10	sr	fc	yes	res	c	
Sharp-shinned hawk			May 18, June 7		unc	yes		oc	yes	sr	c	sr, wr	c					May 21	sr	c	yes	res	fc	
Cooper hawk			yes		c	yes		oc	yes		c	wr, sr	c, rare					May 1	wv	rare		wv	rare	
American goshawk			9 May '98	wr			tv	rare			rare	wr	rare, fc								yes	res	c	
Red tailed hawk			yes		3 spec		wv	rare		tv	c	res	rare					Apr. 1	sr	c	yes	res	c	
Red-shouldered hawk			yes		c	yes		fc	yes		c	res	c					Apr. 3	av	t Oct. '89	yes	sr	fc	Mar. 15
Swainson hawk			yes		unc	yes	res	oc	yes	breeds	c	av	c					May 5	sr	fc		av		
Broad-winged hawk												res	once						wv	c		av		
American rough-legged hawk			Apr. 24		rare			rare			fc	wr	rather unc					formerly L. I.		oc	yes, rare	res	c	
Golden eagle	23 Oct. '85			wv	rare		tv	rare		res	unc	tv	rare						tv					
Bald eagle												res	fc											
White gyrfalcon					unc	yes		oc	yes	sr	c	av											oc	
Gyrfalcon												av	once										fc	Apr. 1
Black gyrfalcon												sr, tv	once					Mar. 30	tv	rare	yes, rare	tv	rare	
Duck hawk												tv	rare, fc						tv	c	yes	res	c, rare	Apr. 3
Pigeon hawk	Sept. 12		May 15					once				res, tv	c					Apr. 25	sr	c		tv, sr		
American sparrow hawk					c	yes		fc	yes	res. (?)	c	sr	unc, ab					May 2	tv	c		av		
American osprey			yes		c	yes	res	c	yes		c	res	c, local					Apr. 20		oc	yes ?	res	c	
American barn owl				tv	unc			oc	yes			res	rare					Apr. 1	tv	c	yes, rare ?		oc	
American long-eared owl					once			rare			unc	tv	unc						wv					
Short-eared owl			yes		unc		tv	oc		wv	unc		c											
					c	yes	tv	fc																

SPECIES RECORDED	FISHER, SING SING, 1898 (*continued*)			EATON, WESTERN NEW YORK, 1901						
	Leaves for north	Returns from north	Departs for south	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds
Wood ibis										
American bittern			Oct. 5	sr	fc	Apr. 18			Nov. 10	May 15, June 1
Least bittern			Aug. 10	sr	fc	May 15			Sept. 25	June 10–25
Great blue heron	Apr. 18	Aug. 16	Oct. 6	tv, sr	fc, local	Mar. 30	Apr. 25	Aug. 1	Nov. 10	yes
American egret				sv	unc	1 June '96			Sept	
Snowy heron				av						
Louisiana heron										
Little blue heron										
Green heron			Sept. 26	sr	fc	May 3			Sept. 28	May 15, June 2
Black-crowned night heron			Oct. 20	tv	fc			Sept		
Yellow-crowned night heron				av						
Whooping crane				tv, formerly						
Sandhill crane				tv, formerly						
King rail				sr	oc					local
Clapper rail				av	twice					
Virginia rail			Sept. 29	sr	fc	Apr. 20			Oct. 10	May 10, June 2
Sora		Aug. 19	Oct. 24	sr	c	Apr. 25			Oct. 18	May 26, June 1
Yellow rail				tv	unc			Sept. 1	Oct. 15	
Black rail				sr	very rare, twice					
Corn crake										
Purple gallinule				sv	ac, once					
Florida gallinule			Nov. 5	sr	c	Apr. 28			Oct. 25	May 15, June 2
American coot	May 16	Sept. 22	Nov. 13	tv	fc	Apr. 25	May 20	Sept. 10	Nov. 5	yes
Red phalarope				tv	rare			Sept. 26, Oct. 4		
Northern phalarope				tv	unc	May 16				
Wilson phalarope				tv	rare			Sept. 2	Oct. 6	
American avocet				sv	ac					
Black-necked stilt										
American woodcock			Dec. 2	sr	fc	Mar. 10			Nov. 15	Apr. 1–20
Wilson snipe	May 6	Oct. 6	Nov. 20	tv, sr	c, rare	Apr. 9	May 10	Sept. 1	Nov. 25	Apr. 22, May 3
Dowitcher				tv	oc			Sept	Oct	
Long-billed dowitcher				tv	rare, once				Oct. '92	
Stilt sandpiper				tv	rare, twice			Sept. 16		
Knot				tv	unc			Aug. 26	Oct. 15	
Purple sandpiper				wv	very rare, once					
Pectoral sandpiper		Sept. 10	Oct. 16	tv	c, fall; unc, spring	May		Sept. 1	Nov. 5	
White-rumped sandpiper		Sept		tv	oc			Sept. 29	Nov. 4	
Baird sandpiper				tv	oc			Aug. 25	Nov. 20	
Least sandpiper	May 22		Oct. 3	tv	fc	May		Aug. 20	Sept. 25	
Dunlin										
Red-backed sandpiper		Oct. 3	Oct. 24	tv	c, fall; rare, spring	May		Sept. 25	Nov. 10	
Curlew sandpiper										
Semipalmated sandpiper		Aug. 14	Oct. 20	tv	c	May		Sept. 1	Nov. 5	
Western sandpiper				tv	fc	May		Aug. 20	Sept. 25	
Sanderling	June 5	Sept. 9	Oct. 5	tv	fc	May 15	June 10	Sept. 1	Oct. 10	
Marbled godwit				tv	rare		18 June '76			
Hudsonian godwit				tv	rare			Sept. 7	Oct. 13	
Greater yellow-legs	June 5		Oct. 28	tv	fc, fall	Apr. 20	May 10	Aug. 15	Nov. 5	
Yellow-legs		Aug. 25	Oct. 5	tv	fc, fall	May 10–20		Aug. 15	Oct. 1	
Solitary sandpiper	May 30	Aug. 27	Oct. 2	tv	fc	May 1	May 20	July 15	Sept. 20	
Willet				av						
Ruff										
Bartramian sandpiper				sr	fc, local	Apr. 20			Sept. 10	May 20, June 1
Buff-breasted sandpiper				tv	rare			Aug. 31		
Spotted sandpiper			Oct. 23	sr	ab	Apr. 18			Sept. 10	May 15, June 1
Long-billed curlew				tv	rare			Oct. 5		
Hudsonian curlew				tv	oc	May 30		Sept. 5		
Eskimo curlew				tv	rare			Oct. 2		
European curlew										
Lapwing										
Black-bellied plover				tv	fc, fall; irreg, spring	May 20	June 10	Aug. 20	Oct. 12	
American golden plover				tv	fc, fall; rare, spring			Aug. 15	Oct. 15	
Killdeer		Sept. 28	Oct. 25	sr	ab	Mar. 10			Nov. 15	Apr. 15, May 2
Semipalmated plover		Aug. 23	Sept. 20	tv	fc, fall; unc, spring			Aug. 20	Sept. 25	
Piping plover				av	twice			Aug. 20		
Wilson plover				sv	ac, twice					
Turnstone				tv	fc, spring; unc, fall	May 15	June 10			
American oyster catcher										
Bobwhite				res	fc, local					May 25, June 1
Canada grouse										
Ruffed grouse				res	c					Apr. 15, May 1
Canadian ruffed grouse				res	oc					
Willow ptarmigan										
Heath hen										
Wild turkey				former res						
Ring-necked pheasant				res						yes
Passenger pigeon	May 17	Aug. 21	Oct. 11	tv	rare					
Mourning dove			Nov. 27	sr	c	Mar. 20			Nov. 15	Apr. 20, June 1
Ground dove										
Turkey vulture				sv	oc	May 23			Dec. 28	
Black vulture				sv	ac, twice	28 May '92				
Swallow-tailed kite										
Marsh hawk			Oct. 30	sr	fc	Apr. 1			Oct. 20	May 5–20
Sharp-shinned hawk				sr, res	fc, oc	Apr. 1			Nov. 10	May 8, June 5
Cooper hawk				sr, res	fc, oc	Apr. 1			Nov. 15	May 1–20
American goshawk	Jan. 14	Oct. 10		wv	unc		Mar. 20	Oct. 21		
Red-tailed hawk				res	c					Mar. 15, Apr. 2
Red-shouldered hawk				sr	c	Mar. 1			Nov. 15	Apr. 1, May 10
Swainson hawk				av	once			1 Oct. '89		
Broad-winged hawk			Oct. 23	sr	rare	Mar			Oct	yes
American rough-legged hawk				wv	fc		Apr.	Oct		
Golden eagle				av	twice			25 Oct. '00		
Bald eagle				res	unc					local
White gyrfalcon										
Gyrfalcon										
Black gyrfalcon				wv	very rare, once			Oct. '90		
Duck hawk				tv	rare					local
Pigeon hawk	May 11	Aug. 10	Oct. 15	tv	unc	Apr.		Sept	Nov	local
American sparrow hawk				sr, res	c, oc	Mar. 15			Nov. 1	May 10–25
American osprey	May 26	Sept. 29	Oct. 20	tv	fc	Apr. 12	May 15	Sept. 15	Oct. 20	
American barn owl				sv	oc					
American long-eared owl				res	fc					May 16
Short-eared owl				wv	fc		Apr.	Nov		

EMBODY, MADISON COUNTY, 1901							LONG ISLAND, DUTCHER, ET AL.			
ent ent	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north
							av	once	21 June '90	
	c	May 1			Nov. 6	yes	tv, sr	c, fc	Apr. 22	
	once	30 May '97					sr	c	May 15, 23, 28	
	c, oc						tv, sr	c, local	Apr. 1, 10, 22	May
							sv	rare	July 17, 27	
							sr	rare	Apr	
							av	once		
	ab					yes	sv	rare	Apr. 3, 7, 24	
	oc						sr	c	Apr. 28, May 5, 19	
							sr, res	c, oc	Apr. 6, 25, May 1	
							av			
							sr	rare	3 Mar. '87	
							sr, res	c, unc	Apr. 3, 16, 30	
	fc					June 5	sr, res	c, unc	Apr. 10, 28	
	c			Sept. 1	Oct. 5		tv, res	c, rare	Apr. 28, May 3, 9	May
							tv, wv	unc, rare	Apr. 29	
							tv	rare		
							av	3 times		
							av			
	fc					yes	tv, sr	unc, local	May 20	
	fc			Sept			tv	fc, fall	Apr. 3, 14	
							tv	fc	Apr. 30, May 20	
							tv	c	May 5, 19	May 29, June 3
	rare, once						tv	casual		
							av			
							av			
	rare					yes	sr, res	c, unc	Feb. 22, Mar. 21	
	c	Apr. 5		Sept. 19	Nov. 1, Dec. 10		tv, wv	c, rare	Mar. 15, 25, Apr. 3	Apr
	rare, twice			Sept. 22			tv	c	Apr. 27, May 9, 17	May 30, June 12
							tv	casual	Mar. 20	
							tv	fc	May 18	
	rare, once						tv	fc	May 15, 20, 23	June 7, 10
							wv	unc		Feb. 11, Mar. 5
	fc			Aug. 25	Oct. 1		tv	rare, spring; c, fall	Mar. 22, Apr. 25	
							tv	fc		
	fc			Sept. 1	Oct. 1		tv	casual	2 May '78	
	fc			Aug. 10	Sept. 29		tv	ab	Apr. 20, 28, May 8	May 26, 29, June 12
							av	once		
	several						tv, wv	c, fall; rare	Apr. 1, 6, 17	May 15, 26, June 6
							av		24 May '83	
	c, fall			Aug. 25	Nov. 1		tv	ab	Apr. 28, May 3, 8	May 30, June 3, 13
							tv	unc, ab, 1897		
	c, local			Sept. 1			tv	c	Mar. 15, 29, Apr. 8	May 30, June 3, 14
							tv	rare		
	rare, once						tv	rare		
	oc, fall						tv	c	Mar. 9, 31, Apr. 8	May 30, June 3, 22
	fc, fall						tv	rare, spring; ab, fall	May 6, 9	May 26
	ab	Apr. 20	May 15	Aug. 25	Oct. 10		tv	c	May 5, 10, 16	May 14, 21, 28
							tv	rare, spring; unc, fall	Apr. 29, May 6, 11	
							av	twice		
	fc					yes	tv, sr	unc, local	Apr	
							tv	rare		
	ab	Apr. 28				yes	sr	ab	Apr. 25, 28, May 2	
							tv	casual		
							tv	rare, spring; c, fall	May 6, 20	May 23, 30
							tv	rare		
							av	once, 1853		
							av	once, Dec. '83		
							tv	c	May 5, 9, 15	May 30, June 5, 8
	rare, once			Sept. 28			tv	rare, spring; c, fall	7 Apr. '82	10, 18 May '85
	ab	Mar. 13				yes	tv	fc	Mar. 1, 5, 18	May 18, 29, June 5
	ab, fall			Aug. 15	Sept. 28		tv	c	Apr. 19, May 11, 18	May 22, 30, June 5
							sr	fc	Mar. 3, 24, Apr. 12	
							av		May 15, 17, 28	
							tv	c	May 1, 12, 19	May 30, June 1, 10
							av	4 times	28 May '77, 10 Mar. '80	
sr	fc					1894	res	fc		
	ab					May 1	res	fc, local		
							1836 (last)			
							1899 (last)			
	c, rare, once	Apr. 28					sr, res	c, rare	Mar. 15, Apr. 9, 11	
							sv	14 records		
							av	once		
							av	twice		
	c					June 3	sr, res	fc, unc	Mar. 8, 23, Apr. 25	
	fc					yes	tv, res	c, fc	Mar. 13, Apr. 16, May 3	
	fc					yes	sr	rare	May 13	
	rare, once						wv	oc		Mar. 11, 21, 27
	c, unc					Apr. 5	res	c		
	c					Apr. 5	res	c		
	fc					yes	sr	fc		
							wv	unc		Feb. 24, Mar
							av			
	rare					Lewis Point	tv	c at times	Feb. 1, Apr. 19	
							av	twice		
							av	twice		
							tv	unc		
	rare, once			Oct. 2			tv	fc	Feb. 14, Apr. 29	
	c, fc					May 1	tv, res	c, oc	Apr. 10, 17	May 1
	rare, twice						sr	fc	Mar. 20, Apr. 16, 24	
							res	local		
	c, ab						sr, res	rare, oc		
	fc					yes	wv, res	c, unc		Mar. 5, 13

SPECIES RECORDED	FISHER, SING SING, 1898 (*continued*)			EATON, WESTERN NEW YORK, 1901							EMBODY, MADISON COUNTY, 1901							LONG ISLAND, DUTCHER, ET AL.			
	Leaves for north	Returns from north	Departs for south	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north
Wood ibis																		av	once	21 June '90	
American bittern			Oct. 5	sr	fc	Apr. 18			Nov. 10	May 15, June 10	sr	c	May 1			Nov. 6	yes	tv, sr	c, fc	Apr. 22	
Least bittern			Aug. 10	sr	fc	May 15			Sept. 25	June 10–25	tv	once	30 May '97					sr	c	May 15, 23, 28	
Great blue heron	Apr. 18	Aug. 16	Oct. 6	tv, sr	fc, local	Mar. 30	Apr. 25	Aug. 1	Nov. 10	yes	sr, wv	c, oc						tv, sr	c, local	Apr. 1, 10, 22	May
American egret				sv	unc	1 June '96			Sept.									sv	rare	July 17, 27	
Snowy heron				av														sr	rare	Apr.	
Louisiana heron																		av	once		
Little blue heron																		sv	rare	Apr. 3, 7, 24	
Green heron			Sept. 26	sr	fc	May 3			Sept. 28	May 15, June 20	sr	ab					yes	sr	c	Apr. 28, May 5, 19	
Black-crowned night heron			Oct. 20	tv	fc			Sept.			tv	oc						sr, res	c, oc	Apr. 6, 25, May 1	
Yellow-crowned night heron				av														av			
Whooping crane				tv, formerly																	
Sandhill crane				tv, formerly																	
King rail				sr	oc					local								sr	rare	3 Mar. '87	
Clapper rail				av	twice													sr, res	c, unc	Apr. 3, 16, 30	
Virginia rail			Sept. 29	sr	fc	Apr. 20			Oct. 10	May 10, June 20	sr	fc					June 5	sr, res	c, unc	Apr. 10, 28	
Sora		Aug. 19	Oct. 24	sr	c	Apr. 25			Oct. 18	May 26, June 15	tv	c			Sept. 1	Oct. 5		tv, res	c, rare	Apr. 28, May 3, 9	May
Yellow rail				tv	unc			Sept. 1	Oct. 15									tv, wv	unc, rare	Apr. 29	
Black rail				sr	very rare, twice													tv	rare		
Corn crake																		av	3 times		
Purple gallinule				sv	ac, once													av			
Florida gallinule			Nov. 5	sr	c	Apr. 28			Oct. 25	May 15, June 20	sr	fc					yes	tv, sr	unc, local	May 20	
American coot	May 16	Sept. 22	Nov. 13	tv	fc	Apr. 25	May 20	Sept. 10	Nov. 5	yes	tv	fc			Sept.			tv	fc, fall	Apr. 3, 14	
Red phalarope				tv	rare			Sept. 26, Oct. 4										tv	fc	Apr. 30, May 20	
Northern phalarope				tv	unc	May 16												tv	c	May 5, 19	May 29, June 3
Wilson phalarope				tv	rare			Sept. 2	Oct. 6		tv	rare, once						tv	casual		
American avocet				sv	ac													av			
Black-necked stilt																		av			
American woodcock			Dec. 2	sr	fc	Mar. 10			Nov. 15	Apr. 1–20	sr	rare					yes	sr, res	c, unc	Feb. 22, Mar. 21	
Wilson snipe	May 6	Oct. 6	Nov. 20	tv, sr	c, rare	Apr. 9	May 10	Sept. 1	Nov. 25	Apr. 22, May 30	tv	c	Apr. 5		Sept. 19	Nov. 1, Dec. 10		tv, wv	c, rare	Mar. 15, 25, Apr. 3	Apr.
Dowitcher				tv	oc			Sept.	Oct.		tv	rare, twice			Sept. 22			tv	c	Apr. 27, May 9, 17	May 30, June 12
Long-billed dowitcher				tv	rare, once				Oct. '92									tv	casual	Mar. 20	
Stilt sandpiper				tv	rare, twice			Sept. 16										tv	fc	May 18	
Knot				tv	unc			Aug. 26	Oct. 15		tv	rare, once						tv	fc	May 15, 20, 23	June 7, 10
Purple sandpiper				wv	very rare, once													wv	unc		Feb. 11, Mar. 5
Pectoral sandpiper		Sept. 10	Oct. 16	tv	c, fall; unc, spring	May		Sept. 1	Nov. 5		tv	fc			Aug. 25	Oct. 1		tv	rare, spring; c, fall	Mar. 22, Apr. 25	
White-rumped sandpiper		Sept.		tv	oc			Sept. 29	Nov. 4									tv	fc		
Baird sandpiper				tv	oc			Aug. 25	Nov. 20		tv	fc			Sept. 1	Oct. 1		tv	casual	2 May '78	
Least sandpiper	May 22		Oct. 3	tv	fc	May		Aug. 20	Sept. 25		tv	fc			Aug. 10	Sept. 29		tv	ab	Apr. 20, 28, May 8	May 26, 29, June 12
Dunlin																		av	once		
Red-backed sandpiper		Oct. 3	Oct. 24	tv	c, fall; rare, spring	May		Sept. 25	Nov. 10		tv	several						tv, wv	c, fall; rare	Apr. 1, 6, 17	May 15, 26, June 6
Curlew sandpiper																		av		24 May '83	
Semipalmated sandpiper		Aug. 14	Oct. 20	tv	c	May		Sept. 1	Nov. 5		tv	c, fall			Aug. 25	Nov. 1		tv	ab	Apr. 28, May 3, 8	May 30, June 3, 13
Western sandpiper				tv	fc	May		Aug. 20	Sept. 25									tv	unc, ab, 1807		
Sanderling	June 5	Sept. 9	Oct. 5	tv	fc	May 15	June 10	Sept. 1	Oct. 10		tv	c, local			Sept. 1			tv	c	Mar. 15, 29, Apr. 8	May 30, June 3, 14
Marbled godwit				tv	rare		18 June '76											tv	rare		
Hudsonian godwit				tv	rare			Sept. 7	Oct. 13		tv	rare, once						tv	rare		
Greater yellow-legs	June 5		Oct. 28	tv	fc, fall	Apr. 20	May 10	Aug. 15	Nov. 5		tv	oc, fall						tv	c	Mar. 9, 31, Apr. 8	May 30, June 3, 29
Yellow-legs		Aug. 25	Oct. 5	tv	fc, fall	May 10–20		Aug. 15	Oct. 1		tv	fc, fall						tv	rare, spring; ab, fall	May 6, 9	May 26
Solitary sandpiper	May 30	Aug. 27	Oct. 2	tv	fc	May 1	May 20	July 15	Sept. 20		tv	ab	Apr. 20	May 15	Aug. 25	Oct. 10		tv	c	May 5, 10, 16	May 14, 21, 28
Willet				av														tv	rare, spring; unc, fall	Apr. 29, May 6, 11	
Ruff																		av	twice		
Bartramian sandpiper				sr	fc, local	Apr. 20			Sept. 10	May 20, June 10	sr	fc					yes	tv, sr	unc, local	Apr.	
Buff-breasted sandpiper				tv	rare			Aug. 31										tv	rare		
Spotted sandpiper			Oct. 23	sr	ab	Apr. 18			Sept. 10	May 15, June 10	sr	ab	Apr. 28				yes	sr	ab	Apr. 25, 28, May 2	
Long-billed curlew				tv	rare			Oct. 5										tv	casual		
Hudsonian curlew				tv	oc	May 30		Sept. 5										tv	rare, spring; c, fall	May 6, 20	May 23, 30
Eskimo curlew				tv	rare			Oct. 2										tv	rare		
European curlew																		av	once, 1853		
Lapwing																		av	once, Dec. '83		
Black-bellied plover				tv	fc, fall; irreg, spring	May 20	June 10	Aug. 20	Oct. 12									tv	c	May 5, 9, 15	May 30, June 5, 8
American golden plover				tv	fc, fall; rare, spring			Aug. 15	Oct 15		tv	rare, once			Sept. 28			tv	rare, spring; c, fall	7 Apr. '89	10, 18 May '85
Killdeer		Sept. 28	Oct. 25	sr	ab	Mar. 10			Nov. 15	Apr. 15, May 20	sr	ab	Mar. 13				yes	tv	fc	Mar. 1, 5, 18	May 18, 20, June 5
Semipalmated plover		Aug. 23	Sept. 20	tv	fc, fall; unc, spring			Aug. 20	Sept. 25		tv	ab, fall			Aug. 15	Sept. 28		tv	c	Apr. 10, May 11, 18	May 22, 30, June 5
Piping plover				av	twice			Aug. 20										sr	fc	Mar 3, 24, Apr. 12	
Wilson plover				sv	ac, twice													av		May 15, 17, 28	
Turnstone				tv	fc, spring; unc, fall	May 15	June 10											tv	c	May 1, 12, 19	May 30, June 1, 10
American oyster catcher																		av	4 times	28 May '77, 10 Mar. '80	
Bobwhite				res	fc, local					May 25, June 15	former sr	fc					1894	res	fc		
Canada grouse																					
Ruffed grouse				res	c					Apr. 15, May 10	res	ab					May 1	res	fc, local		
Canadian ruffed grouse				res	oc																
Willow ptarmigan																		1836 (last)			
Heath hen																					
Wild turkey				former res																	
Ring-necked pheasant				res						yes								1899 (last)			
Passenger pigeon	May 17	Aug. 21	Oct. 11	tv	rare													sr, res	c, rare	Mar. 15, Apr. 9, 11	
Mourning dove			Nov. 27	sr	c	Mar. 20			Nov. 15	Apr. 20, June 10	sr	c, rare, once	Apr. 28								
Ground dove																		sv	14 records		
Turkey vulture				sv	oc	May 23			Dec. 28									av	once		
Black vulture				sv	ac, twice	28 May '92												av	twice	Mar. 8, 23, Apr. 25	
Swallow-tailed kite																	June 3	sr, res	fc, unc	Mar. 13, Apr. 16, May 3	
Marsh hawk			Oct. 30	sr	fc	Apr. 1			Oct. 20	May 5–20	sr	c					yes	tv, res	c, fc	May 13	
Sharp-shinned hawk				sr, res	fc, oc	Apr. 1			Nov. 10	May 8, June 5	sr	fc					yes	sr	rare		Mar. 11, 21, 27
Cooper hawk				sr, res	fc, oc	Apr. 1			Nov. 15	May 1–20	tv	rare, once						wv	oc		
American goshawk	Jan. 14	Oct. 10		wv	unc		Mar. 20	Oct. 21			sr, wv	c, unc					Apr. 5	res	c		
Red-tailed hawk				res	c					Mar. 15, Apr. 20	sr	c					Apr. 5	res	c		
Red-shouldered hawk				sr	c	Mar. 1			Nov. 15	Apr. 1, May 10											
Swainson hawk				av	once			1 Oct. '89			sr	fc					yes	sr	fc		Feb. 24, Mar
Broad-winged hawk			Oct. 23	sr	rare	Mar.			Oct.	yes								wv	unc		
American rough-legged hawk				wv	fc		Apr.	Oct.										av		Feb. 1, Apr 19	
Golden eagle				av	twice			25 Oct. '00			sr	rare					Lewis Point	tv	c at times		
Bald eagle				res	unc					local											
White gyrfalcon																		av	twice		
Gyrfalcon																		av	twice		
Black gyrfalcon				wv	very rare, once			Oct. '90										tv	unc	Feb. 14, Apr. 29	
Duck hawk				tv	rare					local	tv							tv	fc	Apr. 10, 17	May 1
Pigeon hawk	May 11	Aug. 10	Oct. 15	tv	unc	Apr.		Sept	Nov.	local	res, wr	rare, once			Oct. 2		May 1	tv, res	c, oc	Mar. 20, Apr. 16, 24	
American sparrow hawk				sr, res	c, oc	Mar. 15			Nov. 1	May 10–25	tv	c, fc						sr	fc		
American osprey	May 26	Sept. 29	Oct. 20	tv	fc	Apr. 12	May 15	Sept. 15	Oct. 20		res, wr	rare, twice						res	local		
American barn owl				sv	oc													sr, res	rare, oc		Mar. 5, 13
American long-eared owl				res	fc					May 16	sr	c, ab						wv, res	c, unc		
Short-eared owl				wv	fc		Apr.	Nov				fc					yes				

SPECIES RECORDED	LONG ISLAND, DUTCHER, ET AL. (*continued*)			HOFFMAN, EASTERN NEW YORK, 1904				
	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Resident or transient	Common or rare	Arriv fro sou
Wood ibis							casual	21 June
American bittern	Sept. 7, 19, Oct. 1	Oct. 17, Nov. 15	yes	sr		tv	c	Apr. 16
Least bittern		Sept. 2, 6	June			sr	c	June 5
Great blue heron	Aug.	Nov. 25, Dec. 21	Apr. 28	sr, tv	fc	sr, wv	rare, local, rare	Apr. 9, 1
American egret		Aug., Sept.					rare	July 23,
Snowy heron		Sept.					rare	May 30,
Louisiana heron						av	once	
Little blue heron		Sept.				tv	rare	13 Aug.
Green heron		Sept. 13, 18, Oct.	yes	sr	c	sr	c	Apr. 16
Black-crowned night heron		Oct. 20, Dec. 1		sr	c, on coast	sr, wv	c, oc	Apr. 12
Yellow-crowned night heron							casual	Apr. '93,
Whooping crane								
Sandhill crane								
King rail		2 Nov. '86				sr	rare	Mar. 3
Clapper rail		Oct. 16, 26	May 10, 30, July 11			sr, wv	c, oc	late Apr.
Virginia rail		Oct. 10	May 6, 30, July 2	sr	c	sr	fc	Apr., Ma
Sora	Aug., Sept. 1, 18	Oct. 4, 24	yes	sr	c	sr, tv, wv	rare, c, rare	Apr. 28
Yellow rail	Sept. 28, Oct. 1	Oct. 10, 16, Jan. 17				sr	probably	Apr. 29
Black rail	Aug. 1					sr	probably	
Corn crake	15 Aug. '85, 2 Nov. '80	1 Nov. '89				av		
Purple gallinule						tv	rare	
Florida gallinule		Oct. 1, 28		sr	rare	sr	local	
American coot	Sept. 26	Nov. 3, 21, Dec. 8		tv	c	tv, sr	c, probably	Mar. 23
Red phalarope	Aug., Sept. 26	Oct. 22, Nov. 28		tv	at sea	tv	rare	Apr. 30
Northern phalarope	Aug. 13, 24	Oct. 1, 22, Nov.		tv	at sea	tv	unc	Apr. 27
Wilson phalarope	Aug. 15, Sept. 2	Oct. 10, 15					casual	
American avocet						sv	very rare	
Black-necked stilt						av	twice	
American woodcock		Nov. 9, 17, Jan. 1	Mar. 18, Apr. 5	sr	unc	sr, wv	rare, oc	Apr. 12
Wilson snipe	Aug. 6, Sept. 1, 12	Oct. 27, Nov. 15, 25		tv, wv	fc, oc	tv, wv	c, oc	Apr. 22
Dowitcher	July 4, 16	Sept. 1, 8, 15		tv	fc, coast	tv	c	May 15
Long-billed dowitcher	July 16, 23, Aug. 7	Oct. 5, 15, Nov. 30				tv	rare	Mar. 20
Stilt sandpiper	July 12, 16, 26	Sept. 27, Oct. 5, 10		tv	fc, L. I.	tv	irreg	
Knot	July 15, 26, Aug. 13	Oct. 7, 10, 30		tv	c, coast	tv	unc	May 20
Purple sandpiper	Oct. 31, Nov. 16, 23			wv	on L. I.	wv	rare	
Pectoral sandpiper	July 15, 21, 29	Oct. 15, Nov. 1		tv	ab	tv	c, fall	May 8
White-rumped sandpiper	July 4, 20, Aug. 23	Sept. 25, Oct. 10, 30		tv	fc, on coast	tv	fc, fall	
Baird sandpiper	Aug. 26, Sept. 20	Sept. 29, Oct. 31				tv	rare	
Least sandpiper	July 4, 16, 20	Sept. 20, 25, Oct. 7		tv	c, coast	tv	c	May 3
Dunlin	15 Sept. '92						casual, once	
Red-backed sandpiper	Aug. 31, Sept. 22	Oct. 19, 30, Nov. 13		tv	fc, coast	tv	c	May 19
Curlew sandpiper							casual	23 May
Semipalmated sandpiper	July 4, 16, 20	Sept. 18, 30, Oct. 15		tv	c, ab	tv	ab	May 20
Western sandpiper	July 17	Sept.				tv	unc	
Sanderling	July 4, Aug. 1, 13	Sept. 30, Oct. 24, Dec. 8		tv	ab, coast	tv	ab	May 19
Marbled godwit	July 20, Aug. 20, 31	Sept. 8, 15				tv	very rare	
Hudsonian godwit	Aug. 8, 26, 31	Sept. 24, Oct. 5, 9				tv	rare	
Greater yellow-legs	July 10, 20, 29	Oct. 20, 30, Nov. 19		tv	c, coast	tv	c	Apr. 14
Yellow-legs	July 7, 15, 23	Sept. 8, 13, Oct. 5		tv	fc	tv	c, fall	Apr. 25
Solitary sandpiper	July 15, 31, Aug. 10	Sept. 22, Oct. 1, 10		tv	fc	tv	fc	May 16
Willet	July 4, 25, Aug. 8	Aug. 17, 25, Sept. 16		tv	rare	tv	rare	
Ruff						av		
Bartramian sandpiper		Aug. 27, 31, Sept. 10	yes	tv, sr	unc, loca	sr	rare	Apr. 19
Buff-breasted sandpiper	Aug. 25, 28	Sept. 13, 16, 17				tv	very rare	
Spotted sandpiper		Sept. 12, 21, Oct. 25	May 10, 25, June 5	sr	c	sr	c	Apr. 27
Long-billed curlew	July 21, Aug. 5, 15	Sept. 9				tv	very rare	
Hudsonian curlew	July 2, 18, 23	Sept. 9, 16, Oct. 1		tv	unc	tv	reg	Apr. 28
Eskimo curlew	Aug. 29, Sept. 10	Sept. 26			very rare	tv	formerly	
European curlew						av		
Lapwing						av		
Black-bellied plover	July 12, 31, Aug. 4	Oct. 2, 15, Nov. 10		tv	fc	tv	c	May 19
American golden plover	Aug. 1, 10, 24	Oct. 2, 23, Nov. 12		tv	local	tv	fc	
Killdeer	July 9, 19, Aug. 4	Nov. 1, 14, Dec. 14		sr	oc, local	tv, sr	unc, rare	Mar. 7
Semipalmated plover	July 31, Aug. 14, 29	Sept. 23, Oct. 1, 17		tv	c, local	tv	ab	Apr. 29
Piping plover		Aug. 29, Sept. 12, 20	June 10, July 4	sr	local	sr	rare	Mar. 24
Wilson plover		July 1, Aug.				tv	rare	May 16,
Turnstone	July 23, Aug. 1, 8	Sept. 20, Oct. 2, 5		tv	fc, local	tv	fc	May 1
American oyster catcher							casual	Mar. 9, M
Bobwhite				res	local	res	c	
Canada grouse				res	local			
Ruffed grouse			yes	res	c	res	fc	
Canadian ruffed grouse				res	c, local			
Willow ptarmigan								
Heath hen						res	formerly	
Wild turkey								
Ring-necked pheasant								
Passenger pigeon						1878		
Mourning dove		Oct. 4, Nov. 3	May 2	sr		sr	fc	Mar. 25
Ground dove								
Turkey vulture							oc	
Black vulture						av	once	
Swallow-tailed kite						av	twice	
Marsh hawk		Oct. 4, Nov. 8, 15		sr	c	tv, res	c, oc	
Sharp-shinned hawk				tv, res	c; c, local	wv, sr, tv	rare, unc, c	
Cooper hawk		Sept. 20, Dec. 11, Jan. 13	yes	sr	fc, local	tv, wv, sr	fc, oc, rare	
American goshawk	Oct. 10, 21, Dec. 22			wv	irreg	wv	rare	
Red-tailed hawk			yes	res	fc	res	c	
Red-shouldered hawk			yes	res	c, local	res	c	
Swainson hawk								
Broad-winged hawk				sr		res	rare	
American rough-legged hawk	Oct. Nov. 16, Dec. 26			tv	rare	wv	c	
Golden eagle	6 Oct. '77, 19 Oct. '90						casual	
Bald eagle				res		sr	rare	Apr. 21
White gyrfalcon						(?) av		
Gyrfalcon								
Black gyrfalcon						av		
Duck hawk	Oct. 1, 4, 17			res	local	tv	c, fall	
Pigeon hawk	Sept. 6, 18, 27	Oct. 9, 12		tv	unc	tv, wv	c, fall, rare	
American sparrow hawk	Sept. 16, 29	Oct. 9, Nov. 3		sr	unc	sr, tv, wv	fc, c, rare	Apr. 17
American osprey		Sept. 1, 21, Oct. 21	Apr. 22, May 1	sr, tv	local, fc	sr	ab, local	Mar. 24
American barn owl			yes, 1883	res	rare	res	rare	
American long-eared owl			May 5, 30	res	unc	sr, tv	rare, c	Apr. 16
Short-eared owl	Sept. 27, Oct. 12, Nov. 27			res, tv	rare, local, fc	sr, tv	very rare, c	Feb. 27

LONG ISLAND, 1907				ALBANY						
aves or rth	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds
5	Aug. 4	Dec. 11		tv, sr	fc, unc	Apr. 25, May 4			Sept. 6, Oct. 20	
		Aug. 28		sr	unc	May 25			Aug. 16, Sept. 9	
21	July 21	Nov. 16		tv	fc	Apr. 6, 8			Nov. 1, 27	
		Oct. 1								
		Aug. 4								
		Sept. 17		sr	fc	May 3			Sept. 6, 9	yes
		Sept. 29		tv, sr	fc, formerly	Apr. 20, May 5		Aug. 7, 15, 22	Oct. 4	
		Nov. 2		tv	rare					
		Sept	June 5							
		Sept. 30, Oct. 30	June 15	sr	unc				Sept. 30	June 5
		Oct. 23	July 17	sr	fc	Apr. 23			Sept. 24, Oct. 18	yes
		Oct. 15		tv	rare			22 Sept. '84		
	15 Aug. '85	2 Nov. '80		av	once	5 Nov. '83				
		Oct. 1, 28	yes	tv, sr	unc			Aug. 16, 18	Sept. 27	
28	Oct. 17	Nov. 13		tv	unc			Sept. 22, Oct. 4	Oct. 10, 9	
5	Sept. 24	Nov. 27		tv	rare			18 Sept. '89		
29	Aug. 5	Oct. 22		tv	rare			28 Sept. '86		
	Aug. 15, 20	Oct. 10, 15								
		Nov. 21, Dec. 1		tv, sr	fc, rare					yes
27	Sept. 16	Oct. 17, Jan. 1		tv	unc		May 5	Sept. 28, Oct. 8	Nov. 10, 20, Dec. 5	
30	July 12	Sept. 29		tv		25 May '99				
	July 23, Aug. 7	Oct. 6, 15								
	July 28, Aug. 8	Sept. 10								
1	Aug. 12	Sept. 26								
3, 25	Nov. 1, 23									
	July 21	Oct. 30		tv	unc	8 Apr. '82			Sept. 21, 22, 28	
	Aug. 24	Oct. 30		tv	rare				25 Oct. '84	
	Aug. 14, 26	Sept. 20, Oct. 31								
23	July 3	Sept. 22		tv	unc	27 May '04		Aug. 30	Oct. 4	
3	Oct. 11	Oct. 31		tv	unc			Oct. 16	Nov. 8	
1	July 12	Sept. 26		tv	unc			Sept. 19	Oct. 8	
	July 16	Sept. 17								
3	July 20	Oct. 11								
	Aug. 12, 31	Sept. 8, 15		tv	rare				23 Aug. '90	
	Aug. 8, 26	Sept. 23, Oct. 5		tv	rare				24 Oct. '82	
6	July 11	Nov. 4		tv	unc	May 5		Sept. 17, 23	Oct. 19, 23	
1	July 15	Oct. 1		tv	unc			Aug	Sept. 17	
	Aug. 16	Sept. 23		tv	fc	May 5		Sept. 6	Oct. 4	
	July 31, Aug. 10	Aug. 22, Sept. 4								
		Aug. 30, Sept. 17		tv	fc			July 14	Aug. 14, 30	
	Aug. 26, 31	Sept. 4, 11		tv	rare					
		Sept. 7	June 10	sr	c	Apr. 30, May 1				yes
	Aug. 20	Aug. 26								
3	July 10	Sept. 22								
	10 Sept. '76	26 Sept. '84								
	1853									
	18 Dec. '84	fall '05								
17	Aug. 5	Nov. 4		tv	oc				Oct. 8	
	Aug. 29	Oct 30		tv	oc				Oct. 1	
		Nov. 10		tv, sr	unc, oc					
4	July 15	Sept. 18		tv	fc					
		Sept. 3	June 19							
5	Aug. 3	Sept. 14								
			May, Aug		rare					
				res	fc, local					yes
						23 Mar. '82	last shot 1901		last seen 1907	
		Oct. 21		sr	unc	Apr. 15				yes
				tv, sr	fc, oc	Apr. 10			Sept. 10, Oct. 20	
			May 20	tv, res	c, oc				Dec. 1, 20	yes
			May 16	tv, sr	fc, oc			Aug. 30, Sept. 15	Nov. 15, 25	yes
21	Dec. 18			wv				Nov. '97		
			May	res	fc					yes
			early Apr	res	c					yes
			yes	tv, sr	fc, oc					
3	Oct. 31			wv	oc			Feb. 13, 15		
	Oct. 6, 19			av		15 Feb. '83				
		Sept., Dec. 24		tv	oc					
	winter '56									
	Gray, 1877									
	fall '75									
21	Sept. 18	Oct. 16		sr	rare, local					11 Apr. '84
30	Sept. 5			tv	unc				Oct. 1	
		Dec. 30		sr	fc	Mar. 19, 28			Oct. 15, Nov. 19	yes
		Oct. 19		tv	unc	Apr. 25	May 8	Sept. 13, 28	Oct. 11, 12, 17	
			May 30		rare			19 Nov. '88	3 Dec. '90	
		Dec. 11	May 30	res	unc					
		Dec. 25	May 7	wv	fc					

SPECIES RECORDED	LONG ISLAND, DUTCHER, ET AL. (continued)			HOFFMAN, EASTERN NEW YORK, 1904		RAISLIN, LONG ISLAND, 1907							ALBANY						
	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds
Wood ibis							casual	21 June '99											
American bittern	Sept. 7, 19, Oct. 1	Oct. 17, Nov. 15	yes	sr		tv	c	Apr. 16	May 5	Aug. 4	Dec. 11		tv, sr	fc, unc	Apr. 25, May 4			Sept. 6, Oct. 20	
Least bittern		Sept. 2, 6	June			sr	c	June 5			Aug. 28		sr	unc	May 25			Aug. 16, Sept. 9	
Great blue heron	Aug.	Nov. 25, Dec. 21	Apr. 28	sr, tv	fc	sr, wv	rare, local, rare	Apr. 9, 13	May 21	July 21	Nov. 16		tv	fc	Apr. 6, 8			Nov. 1, 27	
American egret		Aug., Sept.					rare	July 23, Aug 3			Oct. 1								
Snowy heron		Sept.					rare	May 30, July 1			Aug. 4								
Louisiana heron						av	once												
Little blue heron		Sept.				tv	rare	13 Aug. '01											
Green heron		Sept. 13, 18, Oct.	yes	sr	c	sr	c	Apr. 16			Sept. 17		sr	fc	May 3			Sept. 6, 9	yes
Black-crowned night heron		Oct. 20, Dec. 1		sr	c, on coast	sr, wv	c, oc	Apr. 12			Sept. 29		tv, sr	fc, formerly	Apr. 20, May 5		Aug. 7, 15, 22	Oct. 4	
Yellow-crowned night heron							casual	Apr. '93, '01											
Whooping crane																			
Sandhill crane																			
King rail		2 Nov. '86				sr	rare	Mar. 3			Nov. 2		tv	rare					
Clapper rail		Oct. 16, 26	May 10, 30, July 11			sr, wv	c, oc	late Apr.			Sept.	June 5							
Virginia rail		Oct. 10	May 6, 30, July 2	sr	c	sr	fc	Apr., May			Sept. 30, Oct. 30	June 15	sr	unc				Sept. 30	June 5
Sora	Aug., Sept. 1, 18	Oct. 4, 24	yes	sr	c	sr, tv, wv	rare, c, rare	Apr. 28			Oct. 23	July 17	sr	fc	Apr. 23			Sept. 24, Oct. 18	yes
Yellow rail	Sept. 28, Oct. 1	Oct. 10, 16, Jan. 17				sr	probably	Apr. 29			Oct. 15		tv	rare			22 Sept. '84		
Black rail	Aug. 1					sr	probably												
Corn crake	15 Aug. '85, 2 Nov. '80	1 Nov. '89				av				15 Aug. '85	2 Nov. '80		av	once	5 Nov. '83				
Purple gallinule						tv	rare												
Florida gallinule		Oct. 1, 28		sr	rare	sr	local				Oct. 1, 28	yes	tv, sr	unc			Aug. 16, 18	Sept. 27	
American coot	Sept. 26	Nov. 3, 21, Dec. 8		tv	c	tv, sr	c, probably	Mar. 23	June 28	Oct. 17	Nov. 13		tv	unc			Sept. 22, Oct. 4	Oct. 10, 9	
Red phalarope	Aug., Sept. 26	Oct. 22, Nov. 28		tv	at sea	tv	rare	Apr. 30	June 5	Sept. 24	Nov. 27		tv	rare			18 Sept. '89		
Northern phalarope	Aug. 13, 24	Oct. 1, 22, Nov.		tv	at sea	tv	unc	Apr. 27	May 29	Aug. 5	Oct. 22		tv	rare			28 Sept. '86		
Wilson phalarope	Aug. 15, Sept. 2	Oct. 10, 15					casual			Aug. 15, 20	Oct. 10, 15								
American avocet						sv	very rare												
Black-necked stilt						av	twice												
American woodcock		Nov. 9, 17, Jan. 1	Mar. 18, Apr. 5	sr	unc	sr, wv	rare, oc	Apr. 12			Nov. 21, Dec. 1		tv, sr	fc, rare					yes
Wilson snipe	Aug. 6, Sept. 1, 12	Oct. 27, Nov. 15, 25		tv, wv	fc, oc	tv, wv	c, oc	Apr. 22	Apr. 27	Sept. 16	Oct. 17, Jan. 1		tv	unc		May 5	Sept. 28, Oct. 8	Nov. 10, 20, Dec. 5	
Dowitcher	July 4, 16	Sept. 1, 8, 15		tv	fc, coast	tv	c	May 15	May 30	July 12	Sept. 29		tv		25 May '99				
Long-billed dowitcher	July 16, 23, Aug. 7	Oct. 5, 15, Nov. 30				tv	rare	Mar. 20		July 23, Aug. 7	Oct. 6, 15								
Stilt sandpiper	July 12, 16, 26	Sept. 27, Oct. 5, 10		tv	fc, L. I.	tv	irreg			July 28, Aug. 8	Sept. 10								
Knot	July 15, 26, Aug. 13	Oct. 7, 10, 30		tv	c, coast	tv	unc	May 20	May 31	Aug. 12	Sept. 26								
Purple sandpiper	Oct. 31, Nov. 16, 23			wv	on L. I.	wv	rare		Mar. 3, 25	Nov. 1, 23									
Pectoral sandpiper	July 15, 21, 29	Oct. 15, Nov. 1		tv	ab	tv	c, fall	May 8		July 21	Oct. 30		tv	unc	8 Apr. '82			Sept. 21, 22, 28	
White-rumped sandpiper	July 4, 20, Aug. 23	Sept. 25, Oct. 10, 30		tv	fc, on coast	tv	fc, fall			Aug. 24	Oct. 30		tv	rare				25 Oct. '84	
Baird sandpiper	Aug. 26, Sept. 20	Sept. 29, Oct. 31				tv	rare			Aug. 14, 26	Sept. 20, Oct. 31								
Least sandpiper	July 4, 16, 20	Sept. 20, 25, Oct. 7		tv	c, coast	tv	c	May 31	May 23	July 3	Sept. 22		tv	unc	27 May '04		Aug. 30	Oct. 4	
Dunlin	15 Sept. '92						casual, once												
Red-backed sandpiper	Aug. 31, Sept. 22	Oct. 19, 30, Nov. 13		tv	fc, coast	tv	c	May 19	June 3	Oct. 11	Oct. 31		tv	unc			Oct. 16	Nov. 8	
Curlew sandpiper							casual	23 May '83											
Semipalmated sandpiper	July 4, 16, 20	Sept. 18, 30, Oct 15		tv	c, ab	tv	ab	May 20	May 31	July 12	Sept. 26		tv	unc			Sept. 19	Oct. 8	
Western sandpiper	July 27	Sept.				tv	unc			July 16	Sept. 17								
Sanderling	July 4, Aug. 1, 13	Sept. 30, Oct. 24, Dec. 8		tv	ab, coast	tv	ab	May 19	June 3	July 20	Oct. 11								
Marbled godwit	July 20, Aug. 20, 31	Sept. 8, 15				tv	very rare			Aug. 12, 31	Sept. 8, 15		tv	rare				23 Aug. '90	
Hudsonian godwit	Aug. 8, 26, 31	Sept. 24, Oct. 5, 9				tv	rare			Aug. 8, 26	Sept. 23, Oct. 5		tv	rare				24 Oct. '82	
Greater yellow-legs	July 10, 20, 29	Oct. 20, 30, Nov. 19		tv	c, coast	tv	c	Apr. 14	June 6	July 11	Nov. 4		tv	unc	May 5		Sept. 17, 23	Oct. 10, 23	
Yellow-legs	July 7, 15, 23	Sept. 8, 13, Oct. 5		tv	fc	tv	c, fall	Apr. 25	June 1	July 15	Oct. 1		tv	unc			Aug.	Sept. 17	
Solitary sandpiper	July 15, 31, Aug. 10	Sept. 22, Oct. 1, 10		tv	fc	tv	fc	May 26		Aug. 16	Sept. 23		tv	fc	May 5		Sept. 6	Oct. 4	
Willet	July 4, 25, Aug. 8	Aug. 17, 25, Sept. 16		tv	rare	tv	rare			July 31, Aug. 10	Aug. 22, Sept. 4								
Ruff						av													
Bartramian sandpiper		Aug. 27, 31, Sept. 10	yes	tv, sr	unc, loca	sr	rare	Apr. 19			Aug. 30, Sept. 17		tv	fc			July 14	Aug. 14, 30	
Buff-breasted sandpiper	Aug. 25, 28	Sept. 13, 16, 17				tv	very rare			Aug. 26, 31	Sept. 4, 11		tv	rare					yes
Spotted sandpiper		Sept. 12, 21, Oct. 25	May 10, 25, June 5	sr	c	sr	c	Apr. 27			Sept. 7	June 10	sr	c	Apr. 30, May 1				
Long-billed curlew	July 21, Aug. 5, 25	Sept. 9				tv	very rare			Aug. 20	Aug. 26								
Hudsonian curlew	July 2, 18, 23	Sept. 9, 16, Oct. 1		tv	unc	tv	reg	Apr. 28	May 13	July 10	Sept. 22								
Eskimo curlew	Aug. 29, Sept. 10	Sept. 26			very rare	tv	formerly			10 Sept. '76	26 Sept. '84								
European curlew						av				1853									
Lapwing						av				18 Dec. '84	fall '05							Oct. 8	
Black-bellied plover	July 12, 31, Aug. 4	Oct. 2, 15, Nov. 10		tv	fc	tv	c	May 19	June 17	Aug. 5	Nov. 4		tv	oc				Oct. 1	
American golden plover	Aug. 1, 10, 24	Oct. 2, 23, Nov. 12		tv	local	tv	fc			Aug. 29	Oct 30		tv	oc					
Killdeer	July 9, 19, Aug. 4	Nov. 1, 14, Dec. 14		sr	oc, local	tv, sr	unc, rare	Mar. 7			Nov. 10		tv, sr	unc, oc					
Semipalmated plover	July 31, Aug. 14, 29	Sept. 23, Oct. 1, 17		tv	c, local	tv	ab	Apr. 29	June 4	July 15	Sept. 18		tv	fc					
Piping plover		Aug. 29, Sept. 12, 20	June 10, July 4	sr	local	sr	rare	Mar. 24			Sept. 3	June 19							
Wilson plover		July 1, Aug.				tv	rare	May 16, 17											
Turnstone	July 23, Aug. 1, 8	Sept. 20, Oct. 2, 5		tv	fc, local	tv	fc	May 1	June 5	Aug. 3	Sept. 14								
American oyster catcher							casual	Mar. 9, May	June										
Bobwhite												May, Aug.		rare					
Canada grouse				res	local	res	c												yes
Ruffed grouse				res	local								res	fc, local					
Canadian ruffed grouse			yes	res	c	res	fc												
Willow ptarmigan				res	c, local														
Heath hen																			
Wild turkey						res	formerly												
Ring-necked pheasant															23 Mar. '82	last shot 1901		last seen 1907	
Passenger pigeon																			yes
Mourning dove		Oct. 4, Nov. 3	May 2	sr		1878													
Ground dove						sr	fc	Mar. 25			Oct. 21		sr	unc	Apr. 15				
Turkey vulture																			
Black vulture							oc												
Swallow-tailed kite						av	once												
Marsh hawk						av	twice											Sept. 10, Oct. 20	
Sharp-shinned hawk		Oct. 4, Nov. 8, 15		sr	c	tv, res	c, oc						tv, sr	fc, oc	Apr. 10			Dec. 1, 20	yes
Cooper hawk				tv, res	c; c, local	wv, sr, tv	rare, unc, c					May 20	tv, res	c, oc			Aug. 30, Sept. 15	Nov. 15, 25	yes
American goshawk	Oct. 10, 21, Dec. 22	Sept. 20, Dec. 11, Jan. 13	yes	sr	fc, local	tv, wv, sr	fc, oc, rare		Mar. 21	Dec. 18		May 16	tv, sr	fc, oc			Nov. '97		yes
Red-tailed hawk				wv	irreg	wv	rare						wv						yes
Red-shouldered hawk			yes	res	fc	res	c					May	res	fc					
Swainson hawk			yes	res	c, local	res	c					early Apr.	res	c					
Broad-winged hawk																			
American rough-legged hawk	Oct. Nov. 16, Dec. 26			sr		res	rare		Apr. 8	Oct. 31		yes	tv, sr	fc, oc			Feb. 13, 15		
Golden eagle	6 Oct. '77, 19 Oct. '90			tv	rare	wv	c			Oct. 6, 19			wv	oc	15 Feb. '83				
Bald eagle							casual						av						
White gyrfalcon				res		sr	rare	Apr. 21		winter '56	Sept., Dec. 24		tv	oc					
Gyrfalcon						(?) av				Gray, 1877									
Black gyrfalcon										fall '75									11 Apr. '84
Duck hawk	Oct. 1, 4, 17					av			May 21	Sept. 18								Oct. 1	
Pigeon hawk	Sept. 6, 18, 27	Oct. 9, 12		res	local	tv	c, fall		Apr. 30	Sept. 5	Oct. 16		sr	rare, local				Oct. 15, Nov. 19	yes
American sparrow hawk	Sept. 16, 29	Oct. 9, Nov. 3		tv	unc	tv, wv	c, fall, rare						tv	unc				O. t. 11, 12, 17	
American osprey		Sept. 1, 21, Oct. 21		sr	unc	sr, tv, wv	fc, c, rare	Apr. 17			Dec. 30		sr	fc	Mar. 19, 28	May 8	Sept. 13, 28	3 Dec. '90	
American barn owl			Apr. 22, May 1	sr, tv	local, fc	sr	ab, local	Mar. 24			Oct. 19		tv	unc	Apr. 25		19 Nov. '88		
American long-eared owl			yes, 1883	res	rare	res	rare					May 30		rare					
Short-eared owl	Sept. 27, Oct. 12, Nov. 27		May 5, 30	res	unc	sr, tv	rare, c	Apr. 16			Dec. 11	May 30	res	unc					
				res, tv	rare, local, fc	sr, tv	very rare, c	Feb. 27			Dec. 25	May 7	wv	fc					

SPECIES RECORDED	ALLEGANY				BROOME				CATTARAUGUS				
	Resident or transient	Common or rare	Arrives from south	Breeds	Resident or transient	Common or rare	Arrives from south	Breeds	Resident or transient	Common or rare	Arrives from south	Departs for south	B
Wood ibis													
American bittern	sr	oc			sr	oc		yes	sr	oc			
Least bittern					sr	unc			sr	unc			
Great blue heron	sr	oc			sr	rare		yes	sr	oc			ye
American egret									sv	av			
Snowy heron													
Louisiana heron													
Little blue heron					av		8 May '00						
Green heron	sr	oc			sr	c	May 7, 12	yes	sr	c	May 13	Sept. 28	ye
Black-crowned night heron		rare				fc							
Yellow-crowned night heron													
Whooping crane													
Sandhill crane													
King rail													
Clapper rail													
Virginia rail		rare							sr	oc	Apr. 14, May 3		ye
Sora			Sept. 23		tv, sr	rare		yes	sr	oc		Sept. 27	
Yellow rail													
Black rail													
Corn crake													
Purple gallinule													
Florida gallinule													
American coot													
Red phalarope													
Northern phalarope													
Wilson phalarope													
American avocet													
Black-necked stilt													
American woodcock	sr	unc	Apr. 5	yes	sr	oc	Mar. 29	yes	sr	fc		Nov. 12	ye
Wilson snipe	sr	rare			tv	fc	Apr. 1		tv, sr	fc, oc		Nov. 18	ye
Dowitcher													
Long-billed dowitcher													
Stilt sandpiper													
Knot													
Purple sandpiper													
Pectoral sandpiper									tv	fc			
White-rumped sandpiper													
Baird sandpiper													
Least sandpiper									tv	fc			
Dunlin													
Red-backed sandpiper													
Curlew sandpiper													
Semipalmated sandpiper									tv	fc			
Western sandpiper													
Sanderling													
Marbled godwit													
Hudsonian godwit													
Greater yellow-legs									tv	fc			
Yellow-legs					tv				tv	fc			
Solitary sandpiper	tv	oc	May 1, 11		tv	fc	May 2, 6, 15		tv	fc			
Willet													
Ruff													
Bartramian sandpiper													
Buff-breasted sandpiper													
Spotted sandpiper	sr	c	Apr. 23, May 4, 16	yes	sr	c	Apr. 13, 23	yes	sr	c	Apr. 26	Sept. 4	ye
Long-billed curlew													
Hudsonian curlew													
Eskimo curlew													
European curlew													
Lapwing													
Black-bellied plover									tv	unc			
American golden plover	tv	rare							tv	rare		Oct. 16	
Killdeer	sr	unc			sr	rare			sr	c	Mar. 10, 23	Nov. 1	ye
Semipalmated plover									tv	oc		Oct. 6	
Piping plover													
Wilson plover													
Turnstone													
American oyster catcher													
Bobwhite	res	rare		yes	res	unc		yes	res	oc			
Canada grouse													
Ruffed grouse	res	c		yes	res	c		yes	res	c			ye
Canadian ruffed grouse													
Willow ptarmigan													
Heath hen													
Wild turkey													
Ring-necked pheasant													
Passenger pigeon				1868		1875 (last)				1889			18
Mourning dove	sr	oc		yes	sr	c	Apr. 3	yes	sr	fc			ye
Ground dove													
Turkey vulture	av												
Black vulture													
Swallow-tailed kite													
Marsh hawk	sr	unc			sr	c		yes	sr	unc			ye
Sharp-shinned hawk	sr	fc		yes	tv	c			sr	unc	Apr. 18		
Cooper hawk	sr	unc		yes	res	fc		yes	sr	fc			ye
American goshawk													
Red-tailed hawk	sr	c		yes	sr	c		yes	sr	c			ye
Red-shouldered hawk	sr	fc		yes	sr	c		yes	sr	c			ye
Swainson hawk													
Broad-winged hawk					tv	unc	Apr. 24						
American rough-legged hawk					wv	oc, May 4							
Golden eagle													
Bald eagle		rare			sv	oc			tv	unc			
White gyrfalcon													
Gyrfalcon													
Black gyrfalcon													
Duck hawk													
Pigeon hawk	tv	oc			tv	oc			tv	oc			
American sparrow hawk	sr, res	fc, oc		yes	res	c		yes	sr	c			y
American osprey					tv	oc	Mar. 20		tv	oc	Mar. 19		
American barn owl					av								
American long-eared owl	res	fc		yes					res	unc			
Short-eared owl									tv	unc			

	CAYUGA						CHAUTAUQUA				
ent ent	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Departs for south	Breeds
	c	Apr. 20				yes	tv, sr	fc, rare			
	fc	May 17, 20				June 8	tv	rare			
	fc, rare	Mar. 20, Apr. 1			Oct. 20, Nov. 30	yes	tv, sr	fc, local	Apr.	Nov.	yes
	fc	May 1, 5			Sept. 20, Oct. 10	yes	sr	c	Apr. 25		yes
	unc										
	fc					yes					
	c	May 4				May 25	sr	unc			
	c	Apr. 25				yes	sr	unc			
	oc										
	once	30 May '75									
	c	Apr. 25				yes					
	c, unc	Apr. 10		Oct. 1	Nov. 10	May 25, June 8	tv	fc			
	oc						tv	rare			
	unc	Mar.			Nov.	yes	sr	unc	Mar.	Nov.	yes
	c, rare	Mar. 25, Apr. 5		Sept. 25	Oct. 20	yes	tv	fc			
	rare			Sept							
	rare				10 Oct. '07						
	c			Aug. 25	Oct. 17, 30		tv	oc			
	fc			Sept. 20	Oct. 12, 25						
	oc			Sept. 1							
	ab	May 20, June 1	June 10	Aug. 1, 10	Sept		tv				
	fc	May		Oct. 12	Nov. 4		tv				
	c			Sept. 1	Oct. 12, 29		tv	unc			
	fc						tv				
	fc	Apr. 25		Sept. 25	Oct. 15, 25		tv	unc			
	fc	May 5, 11		Sept. 10	Oct. 10		tv	unc			
	fc	Apr. 20, May 5	May 25	Aug. 1, 15	Oct. 10		tv	unc			
	rare			Oct. '99			tv	rare	10 May '97		
	fc, local				Sept. 18, 20						
	ab	Apr. 19, 25			Aug. 20, Sept. 5	yes	sr	c	Apr.		
	rare										
	rare			1882							
	oc				Oct. 12, 29						
	rare			28 Sept. '98	29 Oct. '07						
	c	Mar. 19, Apr. 5			Oct. 20	yes	sr	fc			yes
	c	May 11, 30		Aug. 25	Oct. 11		tv				
	rare										
	rare		3 June '06	Aug. 25							
	rare					yes		rare			
	unc					yes	res	unc			yes
	fc										
					1877			15 Apr. '89	30 May '89		
	fc	Mar. 30, Apr. 12			Oct. 1, 20	yes	sr	fc			yes
	c, oc	Apr. 1, 10			Oct. 20	yes	tv	unc			
	unc, fc	Apr. 7	May 6, 13		Oct. 6, 30	yes	tv	fc			
	fc	Mar. 17, 23	Apr. 28			yes	sr	fc			
	rare			24 Nov. '01			tv	rare			
	c, oc					Mar. 25, Apr. 20	sr	fc			yes
	c, oc	Mar. 15				Apr. 20	sr	c			yes
	fc, oc					May 16	tv	rare			
	fc, local		Mar. 17	Oct. 27							
	rare, unc					yes	tv	fc			
			29 Mar. '02								
	unc				Oct. 30		tv	Oct. '99			
	unc						tv	rare			
	fc, oc	Mar. 30, Apr. 10			Nov. 1, 20	May 15	sr, res	c, oc	Apr.		yes
	unc, rare	Apr. 17, 20				formerly local	tv	oc			
	rare, 3 records			Sept. 23	Dec. 13			rare, 10 Sept. '94			
	unc					yes		rare			
	unc, fc					yes	tv	rare			

SPECIES RECORDED	ALLEGANY				BROOME				CATTARAUGUS					CAYUGA							CHAUTAUQUA				
	Resident or transient	Common or rare	Arrives from south	Breeds	Resident or transient	Common or rare	Arrives from south	Breeds	Resident or transient	Common or rare	Arrives from south	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Departs for south	Breeds
Wood ibis					r	oc		yes	r	oc					c	Apr. 20				yes	tv, sr	fc, rare			
American bittern	sr	oc			r	unc			sr	unc					fc	May 17, 20				June 8	tv	rare			
Least bittern					sr	rare		yes	r	oc			yes	r, res	fc, rare	Mar. 20, Apr. 1			Oct. 20, Nov. 30	yes	tv, sr	fc, local	Apr	Nov	yes
Great blue heron	sr	oc							sv	av															
American egret																									
Snowy heron																									
Louisiana heron																									
Little blue heron					av		8 May '00																		
Green heron	sr	oc			sr	c	May 7, 12	yes	sr	c	May 13	Sept. 28	yes	sr	fc	May 1, 5			Sept. 20, Oct. 10	yes	sr	c	Apr. 25		yes
Black-crowned night heron		rare				fc								tv	unc										
Yellow-crowned night heron																									
Whooping crane																									
Sandhill crane																									
King rail															fc					yes					
Clapper rail																									
Virginia rail		rare							sr	oc	Apr. 14, May 3		yes	sr	c	May 4				May 25	sr	unc			
Sora			Sept. 23		tv, sr	rare		yes	r	oc		Sept. 27		r	c	Apr. 25				yes	sr	unc			
Yellow rail														tv	oc										
Black rail														av	once	30 May '75									
Corn crake																									
Purple gallinule																				yes					
Florida gallinule														r	c	Apr. 25				May 25, June 8	tv	fc			
American coot														tv, sr	c, unc	Apr. 10		Oct. 1	Nov. 10						
Red phalarope																					tv	rare			
Northern phalarope														tv	oc										
Wilson phalarope																									
American avocet																									
Black-necked stilt																									
American woodcock	sr	unc	Apr. 5	yes	sr	oc	Mar. 29	yes	sr	fc		Nov. 12	yes	sr	unc	Mar.			Nov	yes	sr	unc	Mar	Nov	yes
Wilson snipe	sr	rare			tv	fc	Apr. 1		tv, sr	fc, oc		Nov. 18	yes	tv, sr	c, rare	Mar. 25, Apr. 5		Sept. 25	Oct. 20	yes	tv	fc			
Dowitcher														tv	rare			Sept							
Long-billed dowitcher																									
Stilt sandpiper														tv	rare				10 Oct. '07						
Knot																									
Purple sandpiper														tv	c			Aug. 25	Oct. 27, 30		tv	oc			
Pectoral sandpiper									tv	fc				tv	fc			Sept. 20	Oct. 12, 25						
White-rumped sandpiper														tv	oc			Sept. 1			tv				
Baird sandpiper														tv	ab	May 20, June 1	June 10	Aug. 1, 10	Sept.						
Least sandpiper									tv	fc											tv				
Dunlin														tv	fc	May		Oct. 12	Nov. 4						
Red-backed sandpiper																					tv	unc			
Curlew sandpiper														tv	c			Sept. 1	Oct. 12, 29						
Semipalmated sandpiper									tv	fc											tv				
Western sandpiper														tv	fc										
Sanderling																									
Marbled godwit																					tv	unc			
Hudsonian godwit														tv	fc	Apr. 25		Sept. 25	Oct. 15, 25		tv	unc			
Greater yellow-legs									tv	fc				tv	fc	May 5, 11		Sept. 10	Oct. 10		tv	unc			
Yellow-legs					tv				tv	fc				tv	fc	Apr. 20, May 5	May 25	Aug. 1, 15	Oct. 10		tv	rare	10 May '07		
Solitary sandpiper	tv	oc	May 1, 11		tv	fc	May 2, 6, 15		tv	fc				tv	rare			Oct. '99							
Willet																									
Ruff														sr	fc, local				Sept. 18, 20						
Bartramian sandpiper																							Apr		
Buff-breasted sandpiper														sr	ab	Apr. 19, 25			Aug. 20, Sept. 5	yes	sr	c			
Spotted sandpiper	sr	c	Apr. 23, May 4, 16	yes	sr	c	Apr. 13, 23	yes	sr	c	Apr. 26	Sept. 4	yes	tv	rare										
Long-billed curlew														tv	rare			1882							
Hudsonian curlew																									
Eskimo curlew																									
European curlew																									
Lapwing														tv	oc				Oct. 12, 29						
Black-bellied plover									tv	unc				tv	rare			28 Sept. '98	29 Oct. '07		sr	fc			yes
American golden plover	tv	rare							tv	rare		Oct. 16		sr	c	Mar. 19, Apr. 5			Oct. 20	yes	tv				
Killdeer	sr	unc			sr	rare			sr	c	Mar. 10, 23	Nov. 1	yes	tv	c	May 11, 30		Aug. 25	Oct. 11						
Semipalmated plover									tv	oc		Oct. 6		tv	rare										
Piping plover																									
Wilson plover														tv	rare		3 June '06	Aug. 25				rare			
Turnstone																									
American oyster catcher														res	rare					yes					yes
Bobwhite	res	rare		yes	res	unc		yes	res	oc											res	unc			
Canada grouse														res	unc					yes					
Ruffed grouse	res	c		yes	res	c		yes	res	c			yes												
Canadian ruffed grouse																									
Willow ptarmigan																									
Heath hen																									
Wild turkey																									
Ring-necked pheasant														res	fc							15 Apr. '89	30 May '89		yes
Passenger pigeon				1868		1875 (last)				1889			1868						1877		sr	fc			
Mourning dove	sr	oc		yes	sr	c	Apr. 3	yes	sr	fc			yes	sr	fc	Mar. 30, Apr. 12			Oct. 1, 20	yes					
Ground dove																									
Turkey vulture	av																								
Black vulture																									
Swallow-tailed kite																					tv	unc			
Marsh hawk	sr	unc			sr	c		yes	sr	unc			yes	sr, res	c, oc	Apr. 1, 10			Oct. 20	yes	tv	fc			
Sharp-shinned hawk	sr	fc		yes	tv	c			r	unc	Apr. 18		yes	res, tv	unc, fc	Apr. 7	May 6, 13		Oct. 6, 30	yes	sr	fc			
Cooper hawk	sr	unc		yes	res	fc		yes	sr	fc			yes	res, tv	fc	Mar. 17, 23	Apr. 28			yes	tv	rare			yes
American rough-legged hawk														tv, wv	rare			24 Nov. '01			sr	fc			yes
Red-tailed hawk	sr	c		yes	sr	c		yes	sr	c			yes	sr, res	c, oc					Mar. 25, Apr. 20	sr	c			
Red-shouldered hawk	sr	fc		yes	sr	c		yes	r	c			yes	sr, res	c, oc	Mar. 15				Apr. 20					
Swainson hawk														tv, sr	fc, oc					May 16	tv	rare			
Broad-winged hawk					tv	unc	Apr. 24							wv	fc, local		Mar. 17	Oct. 27							
American rough-legged hawk					wv	oc, May 4								res, tv	rare, unc					yes	tv	fc			
Golden eagle														av											
Bald eagle		rare			sv	oc			tv	unc				tv			29 Mar. '02				tv	Oct '99			
White gyrfalcon														tv	unc						tv	rare			yes
Gyrfalcon														tv					Oct. 30		sr, res	c, oc	Apr		
Black gyrfalcon														sr, res	fc, oc	Mar. 30, Apr. 10				May 15	tv	oc			
Duck hawk	tv	oc												tv, sr	unc, rare	Apr. 17, 20			Nov. 1, 20	formerly local		rare, 10 Sept. '04			
Pigeon hawk	sr, res	fc, oc		yes	tv	oc			tv	oc			yes		rare, 3 records			Sept. 23	Dec. 13		tv	rare			
American sparrow hawk					res	c			r	c				res	unc					yes					
American osprey					tv	oc	Mar. 20		tv	oc	Mar. 19			res, tv	unc, fc					yes					
American barn owl					av																				
American long-eared owl	res	fc		yes					res	unc															
Short-eared owl									tv	unc															

SPECIES RECORDED	CHEMUNG					CHENANGO			
	Resident or transient	Common or rare	Arrives from south	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Br
Wood ibis									
American bittern	sr	rare				tv	fc	Apr. 23	
Least bittern									
Great blue heron	sr	unc	Apr	Dec. 1		tv	unc	Apr. 2	
American egret									
Snowy heron									
Louisiana heron									
Little blue heron									
Green heron	sr	oc			yes	sr	c		yes
Black-crowned night heron									
Yellow-crowned night heron									
Whooping crane									
Sandhill crane									
King rail									
Clapper rail									
Virginia rail									
Sora									
Yellow rail									
Black rail									
Corn crake									
Purple gallinule									
Florida gallinule									
American coot									
Red phalarope									
Northern phalarope									
Wilson phalarope									
American avocet									
Black-necked stilt									
American woodcock	sr			Nov. 5	yes	sr			yes
Wilson snipe	tv					tv			
Dowitcher									
Long-billed dowitcher									
Stilt sandpiper									
Knot									
Purple sandpiper									
Pectoral sandpiper									
White-rumped sandpiper									
Baird sandpiper									
Least sandpiper									
Dunlin									
Red-backed sandpiper									
Curlew sandpiper									
Semipalmated sandpiper									
Western sandpiper									
Sanderling									
Marbled godwit									
Hudsonian godwit									
Greater yellow-legs									
Yellow-legs	tv								
Solitary sandpiper	tv								
Willet									
Ruff									
Bartramian sandpiper						sr			yes
Buff-breasted sandpiper									
Spotted sandpiper	sr	c	Apr. 26		yes	sr	c	Apr. 29	yes
Long-billed curlew									
Hudsonian curlew									
Eskimo curlew									
European curlew									
Lapwing									
Black-bellied plover									
American golden plover									
Killdeer				Nov. 18					
Semipalmated plover									
Piping plover									
Wilson plover									
Turnstone									
American oyster catcher									
Bobwhite		rare				res	rare		yes
Canada grouse									
Ruffed grouse	res	unc			Apr. 2, 30	res	fc		yes
Canadian ruffed grouse									
Willow ptarmigan									
Heath hen									
Wild turkey									
Ring-necked pheasant									
Passenger pigeon	last seen 1893					last seen 1893			1835
Mourning dove	sr	fc	Apr. 2, 15		yes				
Ground dove									
Turkey vulture						sv	once, 1892		
Black vulture									
Swallow-tailed kite									
Marsh hawk	tv					sr	unc		May 14
Sharp-shinned hawk	tv					tv, sr	rare		yes
Cooper hawk	sr		Apr		yes	sr	fc		yes
American goshawk	wv	rare							
Red-tailed hawk	sr					res	c		Apr
Red-shouldered hawk							rare		yes
Swainson hawk									
Broad-winged hawk	tv	oc	Apr. 26, May 7			sr	c		yes
American rough-legged hawk									
Golden eagle		rare							
Bald eagle									
White gyrfalcon									
Gyrfalcon									
Black gyrfalcon									
Duck hawk									
Pigeon hawk	tv	oc	May 5						
American sparrow hawk	sr				yes	sr	c		yes
American osprey	tv	unc	Apr. 20						
American barn owl						av	13 Sept. '91		
American long-eared owl						sr	fc		yes
Short-eared owl									

	CLINTON				COLUMBIA				CORTLAND			
dent r sient	Common or rare	Arrives from south	Leaves for north	Breeds	Resident or transient	Common or rare	Arrives from south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north
	oc				sr	unc			tv, sr	c, rare	Apr.	
										rare	30 May '92	
	fc				tv				tv, sr	c, oc	Mar. 29	
	unc	May 11			sr		May 26	yes	sr	c	Apr. 15	
					sr	rare			sr	rare		
	fc								sr	rare		
									av	once	?	
									sr	rare		
									tv	rare		
					sr			yes	sr	fc	Mar. 21	
					tv				tv	c	Apr. 1	
									tv	rare		
	fc	May 18							tv	fc		
	fc	May 13	May 18		tv				tv	fc	May 3	May 17
					tv							
					tv				tv	c	May 1, 5	May 20, 23
	fc								sr	fc, local	Apr. 18	
	c			yes	sr	c		yes	sr	ab	Apr. 20, 25, May 4	
									tv	rare		
	fc			yes					tv, sr	c, fc	Apr. 1	
									tv	unc		
					res	fc		yes	res	rare		
					res			yes	res	c		
				yes								
				1867–68					sr, formerly	rare		
	rare				sr	fc	Mar. 30	Apr. 30	sr	unc	Mar. 28	
	oc				sr				sr	c		
	unc				sr				sr	c		
	unc				sr				sr	c		
					sr	c	Mar. 15	yes	wv	rare		
	fc				sr	c	Mar. 15	yes	sr	c		
					sr			yes	sr	c		
	fc				tv				sr	rare		
					wv				wv	oc		
					av	26 Nov. '87						
	fc					unc				rare		
									tv	rare		
	unc				sr				sr	c		
					tv				tv	unc	Apr. 3	May 15
					res			yes	res	fc		
									tv	oc		

SPECIES RECORDED	CHEMUNG					CHENANGO				CLINTON					COLUMBIA				CORTLAND			
	Resident or transient	Common or rare	Arrives from south	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Breeds	Resident or transient	Common or rare	Arrives from south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north
Wood ibis																						
American bittern	sr	rare				tv	tc	Apr. 23		sr	oc				sr	unc			tv, sr	c, rare	Apr.	
Least bittern																				rare	30 May '92	
Great blue heron	sr	unc	Apr.	Dec. 1		tv	unc	Apr. 2		tv	fc				tv				tv, sr	c, oc	Mar. 29	
American egret																						
Snowy heron																						
Louisiana heron																						
Little blue heron																						
Green heron	sr	oc			yes	sr	c		yes	sr	unc	May 11			sr		May 26	yes	sr	c	Apr. 15	
Black-crowned night heron																						
Yellow-crowned night heron																						
Whooping crane																						
Sandhill crane																						
King rail																						
Clapper rail																						
Virginia rail															sr	rare			sr	rare		
Sora										sr	fc								sr	rare		
Yellow rail																						
Black rail																						
Corn crake																						
Purple gallinule																			av	once	?	
Florida gallinule																			sr	rare		
American coot																			tv	rare		
Red phalarope																						
Northern phalarope																						
Wilson phalarope																						
American avocet																						
Black-necked stilt																						
American woodcock	sr			Nov. 5	yes	sr			yes						sr			yes	sr	fc	Mar. 21	
Wilson snipe	tv					tv				tv					tv				tv	c	Apr. 1	
Dowitcher										tv												
Long-billed dowitcher																						
Stilt sandpiper																			tv	rare		
Knot																						
Purple sandpiper																						
Pectoral sandpiper										tv												
White-rumped sandpiper																						
Baird sandpiper																						
Least sandpiper										tv	fc	May 18							tv	fc		
Dunlin																						
Red-backed sandpiper										tv												
Curlew sandpiper																						
Semipalmated sandpiper										tv												
Western sandpiper																						
Sanderling																						
Marbled godwit																						
Hudsonian godwit																						
Greater yellow-legs										tv	fc	May 13	May 18		tv				tv	fc	May 3	May 17
Yellow-legs	tv									tv					tv							
Solitary sandpiper	tv														tv				tv	c	May 1, 5	May 20, 23
Willet																						
Ruff																						
Bartramian sandpiper									yes	sr	fc								sr	fc, local	Apr. 18	
Buff-breasted sandpiper						sr																
Spotted sandpiper	sr	c	Apr. 26		yes	sr	c	Apr. 29	yes	sr	c			yes	sr	c		yes	sr	ab	Apr. 20, 25, May 4	
Long-billed curlew																						
Hudsonian curlew																						
Eskimo curlew																						
European curlew																						
Lapwing																						
Black-bellied plover																						
American golden plover																			tv	rare		
Killdeer				Nov. 18						sr	fc								tv, sr	c, fc	Apr. 1	
Semipalmated plover										tv				yes					tv	unc		
Piping plover																						
Wilson plover																						
Turnstone																						
American oyster catcher																						
Bobwhite		rare							yes						res	fc		yes	res	rare		
Canada grouse						res	rare															
Ruffed grouse	res	unc			Apr. 2, 30	res	fc		yes						res			yes	res	c		
Canadian ruffed grouse										res												
Willow ptarmigan														yes								
Heath hen																						
Wild turkey																						
Ring-necked pheasant																						
Passenger pigeon	last seen 1893					last seen 1893			1835					1867–68					sr, formerly	rare		
Mourning dove	sr	fc	Apr. 2, 15		yes					sr	rare				sr	fc	Mar. 30	Apr. 30	sr	unc	Mar. 28	
Ground dove																						
Turkey vulture																						
Black vulture						sv	once, 1892															
Swallow-tailed kite																						
Marsh hawk	tv								May 14	sr	oc				sr				sr	c		
Sharp-shinned hawk	tv					sr	unc		yes	sr	unc				sr				sr	c		
Cooper hawk	sr		Apr.			tv, sr	rare		yes	sr	unc				sr				sr	c		
American goshawk	wv	rare			yes	sr	fc								sr	c	Mar. 15	yes	wv	rare		
Red-tailed hawk	sr								Apr.	sr	fc				sr	c	Mar. 15	yes	sr	c		
Red shouldered hawk						res	c		yes	sr					sr			yes	sr	c		
Swamson hawk							rare															
Broad-winged hawk	tv	oc	Apr. 26, May 7						yes	sr	fc				tv				sr	rare		
American rough-legged hawk						sr	c			tv					wv				wv	oc		
Golden eagle		rare													nv	26 Nov. '87				rare		
Bald eagle										tv	fc					unc						
White gyrfalcon																						
Gyrfalcon																						
Black gyrfalcon																						
Duck hawk																			tv	rare		
Pigeon hawk	tv	oc	May 5							tv									sr	c		
American sparrow hawk	sr								yes	tv	unc				sr				tv	unc	Apr. 3	May 15
American osprey	tv	unc	Apr. 20		yes	sr	c								tv							
American barn owl																		yes	res	fc		
American long-eared owl						av	11 Sept. '91		yes						res				tv	oc		
Short-eared owl						sr	fc															

SPECIES RECORDED	CORTLAND (*continued*)			DELAWARE						
	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Bre
Wood ibis										
American bittern		Nov		sr		May 12				
Least bittern										
Great blue heron		Dec. 17	yes	tv, sr	fc, rare					
American egret				sv						
Snowy heron										
Louisiana heron										
Little blue heron				av					Aug. '99	
Green heron			yes	sr	ab	May 5				yes, Ma
Black-crowned night heron										
Yellow-crowned night heron										
Whooping crane										
Sandhill crane										
King rail										
Clapper rail										
Virginia rail										
Sora										
Yellow rail										
Black rail										
Corn crake										
Purple gallinule										
Florida gallinule										
American coot		7 Oct. '05								
Red phalarope										
Northern phalarope										
Wilson phalarope										
American avocet										
Black-necked stilt										
American woodcock			yes	sr	rare	Apr. 22				yes
Wilson snipe				tv						
Dowitcher										
Long-billed dowitcher										
Stilt sandpiper										
Knot										
Purple sandpiper										
Pectoral sandpiper										
White-rumped sandpiper										
Baird sandpiper										
Least sandpiper										
Dunlin										
Red-backed sandpiper										
Curlew sandpiper										
Semipalmated sandpiper										
Western sandpiper										
Sanderling										
Marbled godwit										
Hudsonian godwit										
Greater yellow-legs				tv						
Yellow-legs				tv						
Solitary sandpiper				tv	unc	May 10				
Willet										
Ruff										
Bartramian sandpiper										
Buff-breasted sandpiper										
Spotted sandpiper			May 15, 30	sr	ab	May 1, 5				yes
Long-billed curlew										
Hudsonian curlew										
Eskimo curlew										
European curlew										
Lapwing										
Black-bellied plover										
American golden plover	6 Oct. '98									
Killdeer			yes	tv						
Semipalmated plover	Aug. 28									
Piping plover										
Wilson plover										
Turnstone										
American oyster catcher										
Bobwhite			yes	res	unc					
Canada grouse										
Ruffed grouse			May 1, 10	res	c					yes
Canadian ruffed grouse										
Willow ptarmigan										
Heath hen										
Wild turkey										
Ring-necked pheasant										
Passenger pigeon				1890 (last)						
Mourning dove			yes	sr	unc					yes
Ground dove										
Turkey vulture										
Black vulture										
Swallow-tailed kite										
Marsh hawk			May 24	sr	fc					yes
Sharp-shinned hawk			June 1	sr	c	Apr. 28				
Cooper hawk			yes	sr						
American goshawk	24 Oct. '96			wv						
Red-tailed hawk			Mar. 25	res	ab					
Red-shouldered hawk			Apr. 25	sr	unc					
Swainson hawk										
Broad-winged hawk					oc					
American rough-legged hawk	Jan. 9			wv			May 30	Oct. 14		
Golden eagle										
Bald eagle					oc					
White gyrfalcon										
Gyrfalcon										
Black gyrfalcon										
Duck hawk										
Pigeon hawk										
American sparrow hawk			May 11, 20	sr	unc					
American osprey	Aug. 14	Oct. 17								
American barn owl										
American long-eared owl			Apr. 20							
Short-eared owl										

DUTCHESS					ERIE						
Common or rare	Arrives from south	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for south	Returns from north	Departs for south	Breeds
fc, oc					sr	fc	Apr. 20			Oct.	May 20, June 1.
					sr	fc				Sept. 8, 10	May 20, June 10
					tv, sr	c, local	Mar. 25, Apr. 10			Nov. 10, 30	May 1
					sv	10 Aug. '81					
					av						
c	May 1			May 20	sr	c	Apr. 20			Oct.	June 5
					tv, sr	unc, rare					May '96
					av						
					av						
					sr	unc	Apr. 25			Oct., Dec. 3	May 20, 30
					sr	c	Apr. 15, 20			Oct.	May 10
					sr	c	6 Mar. '00, Apr. 30				May 20, 30
					tv	unc	Apr. 26		Sept. 1, 20	Oct. 3, 14	?
					sr	unc					yes
					tv, sr	fc, rare	Apr. 10, 25			Sept. 1, Oct. 1	yes
					tv	rare			Sept. 26	Nov	
					tv	rare			Sept. 24	Oct. 1	
					av						
					av						
fc	Mar.			Apr. 6, May 3	sr	fc	Mar. 15			Oct. 20, Nov. 10	Apr. 1, 20
fc, rare	Apr.				tv, sr	c, unc	Mar. 13, 20, Apr. 10			Nov. 10, Dec. 23	May 10, 20
					tv	rare	Apr. 25		Oct.		
					tv	rare			Oct. '92		
					tv	rare			16 Sept. '93		
					tv	rare			Aug. 20, Sept. 4		
					tv	c, fall	Apr. 18	May	Aug. 20, Sept. 10	Oct. 20, Nov. 25	
					tv	unc			Aug. 6, Sept. 1	16 Oct. '97	
					tv	rare			Aug. 25, Sept. 10	Oct.	
					tv	c			July 12, Aug. 15	Sept	
					tv	unc	Apr., May		Sept	Oct. 25	
					tv	c	May		Sept. 1, 10	Oct.	
					tv	oc					
					tv	c	May		Aug. 15, 25	Oct.	
					tv	rare			Oct.		
					tv	fc	Mar. 30, Apr. 20, May 5		July, Aug. 1, 15	Oct. 20	
					tv	fc	Apr. 30, May 10		July 12, 30	Sept	
					tv	fc	Apr. 25, May 5	May 30	July 15, 25	Oct. 10	
					tv	formerly					
					sr	local	Apr. 25				June 1
					tv	rare			Aug. '88		
c	Apr. 30			May 18, 30	sr	ab	Apr. 25, May 5			Oct. 10	May 20, June 10
					av						
					tv	rare			24 Aug '89		
					tv	rare					
					tv	fc			Sept. 5, 15	Oct.	
					tv	c, fall			Oct.		
fc	Mar. 22			yes	sr	c	Mar. 4, 12			Oct. 20, Nov. 5.	Apr. 17, May 15
					tv	fc			July, Aug. 10	Sept	
					tv	rare					
					av						
					tv	unc	June 2		Aug. 31	Sept	
c					res	rare					June 10
unc					res	fc					Apr. 25, May 10
					res	local					yes
					formerly ab	now av	14 Apr. '97		Sept. '91		formerly
c	Apr. 15			May 2, 10	sr	c	Apr. 2			Nov	yes
rare	12 July '82		12 Sept. '99		av						
					av	once					
fc	Mar. 25		Nov.	May 14	sr	fc	Apr. 1			Nov. 1	May 10, June 10
					tv, sr	c, unc					May 12, yes
fc				Apr. 29, May 12	sr	fc					May 10
					wv	unc		Mar. 11	Oct. 21, 31		
c				Apr. 15	sr, res	c, oc					Apr. 1, 20
c	Mar. 20			Apr. 10, May 5	sr	c	Mar. 15				Apr. 20
					tv	rare	Apr. 20		Oct. 20		
					wv	unc		Mar. 20	Oct.		
fc, rare				yes, 1904	tv	unc					yes
oc					tv	rare					
unc					sc	fc					yes
c	Mar.			Apr. 26, May 10	sr	c	Mar. 25				May 10, 25
unc		Sept. 4			tv, sr	unc, rare	Apr.			Oct.	yes
					av		July 5, 18			Oct. 3	
rare				27 Mar. '98	res	unc					yes
unc					tv, res	fc, rare					7 Apr. '98

SPECIES RECORDED	CORTLAND (*continued*)			DELAWARE							DUTCHESS						ERIE						
	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for south	Returns from north	Departs for south	Breeds
Wood ibis																							
American bittern		Nov		sr		May 12					tv, sr	fc, oc					sr	fc	Apr. 20			Oct	May 20, June 1
Least bittern																	sr	fc				Sept. 8, 10	May 20, June 10
Great blue heron		Dec. 17	yes	tv, sr	fc, rare						tv						tv, sr	c, local	Mar. 25, Apr. 10			Nov. 10, 30	May 1
American egret				sv													sv	10 Aug. '81					
Snowy heron																	av						
Louisiana heron																							
Little blue heron				av					Aug. '99							May 20	sr	c	Apr. 20			Oct	June 5
Green heron			yes	sr	ab	May 5				yes, May	sr	c	May 1				tv, sr	unc, rare					May '96
Black-crowned night heron											tv						av						
Yellow-crowned night heron																							
Whooping crane																	av						
Sandhill crane																	sr	unc	Apr. 25			Oct., Dec. 3	May 20, 30
King rail																							
Clapper rail																	sr	c	Apr. 15, 20			Oct	May 10
Virginia rail																	sr	c	6 Mar. '00, Apr. 30				May 20, 30
Sora																	tv	unc	Apr. 26		Sept. 1, 20	Oct. 3, 14	?
Yellow rail																							
Black rail																							
Corn crake																							
Purple gallinule																	sr	unc					yes
Florida gallinule																	tv, sr	fc, rare	Apr. 10, 25			Sept. 1, Oct. 1	yes
American coot		7 Oct. '05									tv						tv	rare			Sept. 20	Nov	
Red phalarope																	tv	rare			Sept. 24	Oct. 1	
Northern phalarope																	av						
Wilson phalarope																	av						
American avocet																							
Black-necked stilt											sr	fc	Mar.			Apr. 6, May 3	sr	fc	Mar. 15			Oct 20, Nov. 10	Apr 1, 20
American woodcock			yes	sr	rare	Apr. 22				yes	tv, sr	c, unc	Apr.				tv, sr	c, unc	Mar. 13, 20, Apr. 10			Nov. 10, Dec. 23	May 10, 20
Wilson snipe				tv													tv	rare	Apr. 25		Oct		
Dowitcher																	tv	rare			Oct. '02		
Long-billed dowitcher																	tv	rare			10 Sept. '03		
Stilt sandpiper																	tv	rare			Aug. 20, Sept. 4		
Knot																							
Purple sandpiper											tv						tv	c, fall	Apr. 18	May	Aug. 20, Sept. 10	Oct 20, Nov. 25	
Pectoral sandpiper																	tv	unc			Aug. 6, Sept 1	10 Oct. '97	
White-rumped sandpiper																	tv	rare			Aug. 25, Sept 10	Oct	
Baird sandpiper																	tv	c			July 12, Aug. 15	Sept.	
Least sandpiper																							
Dunlin																	tv	unc	Apr, May		Sept	Oct. 25	
Red-backed sandpiper																							
Curlew sandpiper																	tv	c	May		Sept. 1, 10	Oct	
Semipalmated sandpiper																	tv	oc					
Western sandpiper																	tv	c	May		Aug 15, 25	Oct	
Sanderling																	tv	rare			Oct		
Marbled godwit																							
Hudsonian godwit											tv						tv	fc	Mar 30, Apr 20, May 5		July, Aug. 1, 25	Oct. 20	
Greater yellow-legs				tv							tv						tv	fc	Apr. 30, May 10		July 12, 30	Sept	
Yellow-legs				tv							tv						tv	fc	Apr. 25, May 5	May 30	July 15, 25	Oct. 10	
Solitary sandpiper				tv	unc	May 10											tv	formerly					
Willet																							
Ruff																	sr	local	Apr. 25				June 1
Bartramian sandpiper																	tv	rare			Aug. '88		
Buff-breasted sandpiper																	sr	ab	Apr. 25, May 5			Oct. 10	May 20, June 10
Spotted sandpiper			May 15, 30	sr	ab	May 1, 5				yes	sr	c	Apr. 30			May 18, 30	av				24 Aug '89		
Long-billed curlew																	tv	rare					
Hudsonian curlew																	tv	rare					
Eskimo curlew																							
European curlew																							
Lapwing																	tv	fc			Sept. 5, 15	Oct	
Black-bellied plover																	tv	c, fall			Oct		
American golden plover	6 Oct. '98																sr	c	Mar. 4, 12			Oct. 20, Nov. 5	Apr. 17, May 15
Killdeer			yes	tv							sr	fc	Mar. 22			yes	tv	fc			July, Aug. 10	Sept	
Semipalmated plover	Aug. 28										tv	rare											
Piping plover											av										Aug. 31	Sept	
Wilson plover											tv	unc	June 2										
Turnstone																							
American oyster catcher											res	rare											June 10
Bobwhite			yes	res	unc												res	fc					
Canada grouse																							Apr. 25, May 10
Ruffed grouse			May 1, 10	res	c					yes	res	fc											
Canadian ruffed grouse																							
Willow ptarmigan																							
Heath hen																							
Wild turkey																							yes
Ring-necked pheasant																	res	local			Sept. '91		formerly
Passenger pigeon				1890 (last)													formerly ab	now av	14 Apr. '97			Nov	yes
Mourning dove			yes	sr	unc					yes	sr	c	Apr 15			May 2, 10	sr	c	Apr. 2				
Ground dove																							
Turkey vulture											av						av						
Black vulture												rare	12 July '82		12 Sept. '99		av	once				Nov. 1	May 10, June 10
Swallow-tailed kite																							May 12, yes
Marsh hawk			May 24	sr	fc					yes	sr	fc	Mar. 25		Nov	May 14	sr	fc	Apr. 1				May 10
Sharp-shinned hawk			June 1	sr	c	Apr. 28					tv, sr	c, unc					tv, sr	c, unc					
Cooper hawk			yes	sr							sr	fc				Apr. 20, May 12	sr	fc		Mar. 11	Oct. 21, 11		Apr. 1, 20
American goshawk	24 Oct. '96			wv							wv	unc					wv	unc					Apr. 20
Red-tailed hawk			Mar. 25	res	ab						sr, re	c, oc				Apr. 15	sr, re	c	Mar. 15				
Red-shouldered hawk			Apr. 25	sr	unc						sr	c	Mar. 20			Apr. 10, May 5	sr	c			Oct 25		
Swainson hawk																			Apr. 20	Mar. 20	Oct		
Broad-winged hawk					oc						tv	rare					tv	rare					
American rough-legged hawk	Jan. 9			wv			May 30	Oct. 14			wv	unc					wv	unc					yes
Golden eagle																							
Bald eagle					oc						tv	unc				yes, 1904	tv	unc					
White gyrfalcon																							
Gyrfalcon																							
Black gyrfalcon																							yes
Duck hawk											tv	rare					tv	rare					May 10, 25
Pigeon hawk											sc	fc					sc	fc	Mar. 25			Oct	yes
American sparrow hawk			May 11, 20	sr	unc						sr	c	Mar			Apr. 26, May 1	sr	c	Apr			Oct 1	
American osprey	Aug. 14	Oct. 17									tv, sr	unc, rare	July 5, 18				tv, sr	unc, rare					yes
American barn owl											av						av						
American long eared owl			Apr. 20								res	unc					res	unc					7 Apr. '08
Short-eared owl											tv, res	fc, rare				27 Mar. '08	tv, res	fc, rare					

SPECIES RECORDED	ESSEX						FRANKLIN				
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Departs for south	Breeds	Resident or transient	Common or rare	Returns from north	Departs for south	Bre
Wood ibis											
American bittern	sr	unc				yes, 1905	tv, sr	fc, rare		Sept. 19	
Least bittern											
Great blue heron	sr	fc	Apr. 12		Sept. 8	1905	sr, tv	unc, ab		Sept., Dec	yes
American egret											
Snowy heron											
Louisiana heron											
Little blue heron											
Green heron	sr	unc				yes					
Black-crowned night heron	tv, sr	unc					tv	fc	Sept		
Yellow-crowned night heron											
Whooping crane											
Sandhill crane											
King rail											
Clapper rail											
Virginia rail	sr										
Sora	sr										
Yellow rail											
Black rail											
Corn crake											
Purple gallinule											
Florida gallinule											
American coot	tv										
Red phalarope											
Northern phalarope							tv	oc		Sept. '06	
Wilson phalarope											
American avocet											
Black-necked stilt											
American woodcock	sr	unc	Apr. 1, 6, May 1		Oct. 23	yes	sr	fc	Sept. 4		yes
Wilson snipe	tv				Sept. 20		tv	c	Sept. 12		
Dowitcher											
Long-billed dowitcher											
Stilt sandpiper											
Knot	tv										
Purple sandpiper											
Pectoral sandpiper	tv						tv		Aug. 19	Sept. 15	
White-rumped sandpiper											
Baird sandpiper											
Least sandpiper	tv	ab, fall					tv	c	Aug	Sept	
Dunlin											
Red-backed sandpiper	tv										
Curlew sandpiper											
Semipalmated sandpiper	tv	c	May 18				tv	c	Aug	Sept,	
Western sandpiper							tv		13 Sept. '80		
Sanderling	tv						tv		29 Sept. '96		
Marbled godwit	tv	oc			Oct						
Hudsonian godwit											
Greater yellow-legs	tv	fc			Sept. 30		tv	c	Sept. 4	Sept. 20	
Yellow-legs	tv		Apr. 30				tv		Aug. 19		
Solitary sandpiper	sr	rare	Apr. 29, May 3, 10	May 30			tv	ab		Sept	
Willet											
Ruff											
Bartramian sandpiper	tv										
Buff-breasted sandpiper											
Spotted sandpiper	sr	c	May 3			yes	sr	c		Sept. 16	
Long-billed curlew											
Hudsonian curlew											
Eskimo curlew											
European curlew											
Lapwing											
Black-bellied plover	tv										
American golden plover	tv	c, irreg			Oct		tv		2 Sept. '96		
Killdeer	tv		May 9								
Semipalmated plover	tv	ab					tv	c	Aug. 20	Sept. 16	
Piping plover											
Wilson plover											
Turnstone											
American oyster catcher											
Bobwhite											
Canada grouse	res	rare				yes	res, formerly				
Ruffed grouse	res	c				yes					
Canadian ruffed grouse	res	c				yes	res	c			yes
Willow ptarmigan											
Heath hen											
Wild turkey											
Ring-necked pheasant											
Passenger pigeon	sr	formerly						c, till 1881			
Mourning dove	sr	rare				yes					
Ground dove											
Turkey vulture											
Black vulture											
Swallow-tailed kite											
Marsh hawk	sr	unc				yes	tv, sr	c, rare			
Sharp-shinned hawk	tv, sr	c, oc				yes	tv	c	Aug	Sept	
Cooper hawk	sr	fc	Apr. 16			yes	sr				
American goshawk	sr	unc					tv, sr	c, irreg; unc			
Red-tailed hawk	sr	c	Mar. 20			yes	tv, sr	c, unc	Oct. 25		
Red-shouldered hawk	sr	fc, local	Mar. 30			yes	sr, tv	unc, fc			
Swainson hawk											
Broad-winged hawk	sr	fc	Apr. 27			yes, May 13	sr	fc			
American rough-legged hawk											
Golden eagle											
Bald eagle	sr	unc				yes	res	c, formerly			
White gyrfalcon											
Gyrfalcon											
Black gyrfalcon											
Duck hawk	sr	unc				yes, 1905	tv	oc			
Pigeon hawk	tv						tv	c	Aug. 18	Sept. 12	
American sparrow hawk	sr	fc	Apr			yes	tv, sr	c, oc	Aug. 25	Sept. 14	
American osprey	sr	fc	Apr. 24, 27			yes, 1905	tv, sr	fc, unc	Aug. 15	Sept. 17	yes
American barn owl											
American long-eared owl	res	rare				yes	res				rare
Short-eared owl	sr	rare				yes					

FULTON				GENESEE					GREENE		
ident or sient	Common or rare	Arrives from south	Breeds	Resident or transient	Common or rare	Arrives from south	Departs for south	Breeds	Resident or transient	Common or rare	Breeds
	c			sr		Apr. 24		yes	sr		
	c, oc	Apr.	yes	tv, sr	c, local			yes	tv	fc	
	c	Apr. 28	yes	sr		May 4		yes	sr		
	oc								tv		
										rare	
				sr	fc						
				sr	fc						
				sr	fc			yes			
	oc			tv		Apr. 22			tv	c, fall	
	c	Mar. 29	yes	sr	c			yes	sr		yes
	fc			tv, sr	c, oc	Apr. 1, 10		yes	tv	Aug., Sept.	
				tv							
	unc	May 24		tv							
				tv							
				tv	fc						
	unc			tv	fc						
	unc, oc		yes	tv	fc				tv	fc	
	oc										
	c		yes	sr	c	Apr. 30, May 3		yes	sr	c	yes
				tv	rare		Nov. 8				
	c	Mar. 29	yes	sr	c	Mar. 5, 15					
		May 17							tv		
				res	rare				res		yes
	c		yes	res	c			yes	res	c	yes
		1895 (last)					20 Sept. '99				
	c	Apr.	yes	sr	fc	Apr. 1, 10	Dec. 24, 31	yes	sr	fc	yes
	c	Apr. 4	yes	sr	fc			yes			
	unc		yes	tv							
	unc			sr					sr		yes
		Feb. 26									
	c		yes	sr	fc			yes			
	fc			sr	fc						
				tv	fc						
	Pine Lake										
	rare								tv	unc	
				tv	fc				tv		
	c	Apr. 1	yes	sr	c			yes	sr		yes
	rare	Apr. 10	yes	tv, sr	unc, rare	Apr. 16, 21		yes			
				res				yes			
	oc			res				yes			

SPECIES RECORDED	ESSEX						FRANKLIN					FULTON				GENESEE					GREENE		
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Departs for south	Breeds	Resident or transient	Common or rare	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Breeds	Resident or transient	Common or rare	Arrives from south	Departs for south	Breeds	Resident or transient	Common or rare	Breeds
Wood ibis						yes, 1905	tv, sr	fc, rare		Sept. 19						sr		Apr. 24		yes	sr		
American bittern	sr	unc										sr	c										
Least bittern					Sept. 8	1905	sr, tv	unc, ab		Sept., Dec	yes	tv, sr	c, oc	Apr	yes	tv, sr	c, local			yes	tv	fc	
Great blue heron	sr	fc	Apr. 12																				
American egret																							
Snowy heron																	?						
Louisiana heron																							
Little blue heron														Apr. 28	yes	sr		May 4		yes	sr		
Green heron	sr	unc				yes						sr	c								tv		
Black-crowned night heron	tv, sr	unc					tv	fc	Sept			sr	oc										
Yellow-crowned night heron																							
Whooping crane																						rare	
Sandhill crane																							
King rail																sr	fc						
Clapper rail																sr	fc						
Virginia rail	sr																						
Sora	sr																						
Yellow rail																							
Black rail																							
Corn crake																							
Purple gallinule																sr	fc			yes			
Florida gallinule																tv		Apr. 22			tv	c, fall	
American coot	tv												oc										
Red phalarope																							
Northern phalarope							tv	oc		Sept. '06													
Wilson phalarope																							
American avocet																							
Black-necked stilt																							
American woodcock	sr	unc	Apr. 1, 6, May 1		Oct. 23	yes	sr	fc	Sept. 4		yes	sr	c	Mar. 29	yes	sr	c			yes	sr		yes
Wilson snipe	tv				Sept. 20		tv	c	Sept. 12			tv	fc			tv, sr	c, oc	Apr. 1, 10		yes	tv	Aug., Sept.	
Dowitcher																							
Long-billed dowitcher																							
Stilt sandpiper																							
Knot	tv																						
Purple sandpiper																							
Pectoral sandpiper	tv						tv		Aug. 19	Sept. 15		tv				tv							
White-rumped sandpiper																							
Baird sandpiper																							
Least sandpiper	tv	ab, fall					tv	c	Aug	Sept		tv	unc	May 24		tv							
Dunlin																							
Red-backed sandpiper	tv																						
Curlew sandpiper																							
Semipalmated sandpiper	tv	c	May 18				tv	c	Aug	Sept		tv				tv							
Western sandpiper							tv		13 Sept. '80														
Sanderling	tv						tv		29 Sept. '96							tv	fc						
Marbled godwit	tv	oc			Oct.																		
Hudsonian godwit												tv	unc			tv	fc				tv	fc	
Greater yellow legs	tv	fc			Sept. 30		tv	c	Sept. 4	Sept. 20						tv	fc						
Yellow-legs	tv		Apr. 30				tv		Aug. 19			tv, sr	unc, oc		yes	tv	fc						
Solitary sandpiper	sr	rare	Apr. 29, May 3, 10	May 30			tv	ab		Sept													
Willet																							
Ruff												tv	oc										
Bartramian sandpiper	tv																						
Buff-breasted sandpiper																							
Spotted sandpiper	sr	c	May 3			yes	sr	c		Sept. 16		sr	c		yes	sr	c	Apr. 30, May 3		yes	sr	c	yes
Long-billed curlew																							
Hudsonian curlew																							
Eskimo curlew																							
European curlew																							
Lapwing																							
Black bellied plover	tv																		Nov. 8				
American golden plover	tv	c, irreg			Oct.		tv		2 Sept. '96							tv	rare						
Killdeer	tv		May 9									sr	c	Mar. 29	yes	sr	c	Mar. 5, 15			tv		
Semipalmated plover	tv	ab					tv	c	Aug. 20	Sept. 16		tv		May 17									
Piping plover																							
Wilson plover																							
Turnstone																					res		yes
American oyster catcher																							
Bobwhite																res	rare				res	c	yes
Canada grouse	res	rare				yes	res, formerly					res								yes			
Ruffed grouse	res	c				yes							c		yes	res	c						
Canadian ruffed grouse	res	c				yes	res	c			yes												
Willow ptarmigan																							
Heath hen																							
Wild turkey																							
Ring-necked pheasant																							
Passenger pigeon	sr	formerly						c, till 1881				sr		1805 (last)					30 Sept. '99	yes	sr	fc	yes
Mourning dove	sr	rare				yes							c	Apr	yes	sr	fc	Apr. 1, 10	Dec. 24, 31				
Ground dove																							
Turkey vulture																							
Black vulture																							
Swallow tailed kite												sr								yes			
Marsh hawk	sr	unc				yes	tv, sr	c, rare				sr	c	Apr. 4	yes	sr	fc				sr		yes
Sharp-shinned hawk	tv, sr	c, oc				yes	tv	c	Aug	Sept		tr	unc		yes	tv							
Cooper hawk	sr	fc	Apr. 16			yes	sr					wv	unc			sr				yes			
American goshawk	sr	unc					tv, sr	c, irreg; unc				sr		Feb. 26									
Red tailed hawk	sr	c	Mar. 20			yes	tv, sr	c, unc	Oct. 25			sr	c		yes	sr	fc						
Red-shouldered hawk	sr	fc, local	Mar. 30			yes	sr, tv	unc, fc					fc			sr	fc						
Swainson hawk																							
Broad-winged hawk	sr	fc	Apr. 27			yes, May 13	sr	fc								tv	fc						
American rough-legged hawk												av									tv	unc	
Golden eagle												tr	Pine Lake										
Bald eagle	sr	unc				yes	res	c, formerly					rare										
White gyrfalcon																							
Gyrfalcon																							
Black gyrfalcon																					tv		
Duck hawk	sr	unc				yes, 1905	tv	oc												yes	sr		yes
Pigeon hawk	tv						tv					sr											
American sparrow hawk	sr	fc	Apr.			yes	tv, sr	c, oc	Aug. 18	Sept. 12		sr	c			tv	fc			yes			
American osprey	sr	fc	Apr. 24, 27			yes, 1905	tv, sr	fc, unc	Aug. 25	Sept. 14	yes		rare	Apr. 1	yes	sr	c	Apr. 16, 21					
American barn owl									Aug. 15	Sept. 17				Apr. 10	yes	tv, sr	unc, rare			yes			
American long-eared owl	res	rare				yes	res				rare	res				res				yes			
Short-eared owl	sr	rare				yes							oc			res							

SPECIES RECORDED	HAMILTON				HERKIMER				
	Resident or transient	Common or rare	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Departs for south	Bree
Wood ibis									
American bittern	sr	unc		June 10	sr	fc			June 1, 1c
Least bittern									
Great blue heron	sr	c		yes	sr	unc	Apr. 8	Oct. 21	yes
American egret					sv	rare	spring '82		
Snowy heron									
Louisiana heron									
Little blue heron									
Green heron	sr	unc			sr		May	Oct. 1	June 10
Black-crowned night heron					sr		May 20		
Yellow-crowned night heron									
Whooping crane									
Sandhill crane									
King rail									
Clapper rail									
Virginia rail					sr				yes
Sora					sr				yes
Yellow rail									
Black rail									
Corn crake									
Purple gallinule									
Florida gallinule									
American coot	tv	fc			sr	oc			
Red phalarope	tv	rare	25 Sept. '04		tv	rare		Sept. 25	
Northern phalarope	tv	rare	Sept. '06						
Wilson phalarope									
American avocet									
Black-necked stilt									
American woodcock	sr	unc		yes	sr	fc	Mar. 10	Nov. 15	Apr. 20
Wilson snipe	tv	rare	Oct. 7		tv		Mar. 28	Nov. 10	
Dowitcher									
Long-billed dowitcher									
Stilt sandpiper									
Knot									
Purple sandpiper									
Pectoral sandpiper					tv				
White-rumped sandpiper									
Baird sandpiper									
Least sandpiper					tv				
Dunlin									
Red-backed sandpiper									
Curlew sandpiper									
Semipalmated sandpiper									
Western sandpiper									
Sanderling									
Marbled godwit									
Hudsonian godwit									
Greater yellow-legs	tv				tv				
Yellow-legs	tv				tv				
Solitary sandpiper	sr	unc			sr	unc	May 1		
Willet									
Ruff									
Bartramian sandpiper					sr		Apr. 13	Sept. 1	yes
Buff-breasted sandpiper									
Spotted sandpiper	sr	c		yes	sr	c	Apr. 24, 30	Aug. 27, Sept. 10, Oct. 10	yes
Long-billed curlew									
Hudsonian curlew									
Eskimo curlew									
European curlew									
Lapwing									
Black-bellied plover					tv				
American golden plover					tv				
Killdeer	tv	unc			sr		Apr. 4, 13	Nov. 10	yes
Semipalmated plover									
Piping plover									
Wilson plover									
Turnstone									
American oyster catcher									
Bobwhite									
Canada grouse	res	rare			res	rare			yes
Ruffed grouse					res	c			yes
Canadian ruffed grouse	res	c		yes	res	c			yes
Willow ptarmigan									
Heath hen									
Wild turkey									
Ring-necked pheasant									
Passenger pigeon	former sr	irreg							1882 (last
Mourning dove					sr		Apr. 15		
Ground dove									
Turkey vulture									
Black vulture									
Swallow-tailed kite									
Marsh hawk	sr	unc		yes	sr	c			
Sharp-shinned hawk	sr	fc		yes	tv, sr	c, rare			
Cooper hawk	sr	unc		yes	sr				yes
American goshawk	res	rare		1898					
Red-tailed hawk	sr	c		yes	sr				yes
Red-shouldered hawk	sr	fc		yes	res				Apr. 22,
Swainson hawk									
Broad-winged hawk	sr	fc		May 19, June 15	sr				May 19, J
American rough-legged hawk					wv				
Golden eagle					tv	rare	23 Oct. '85	15 Sept. '87	
Bald eagle	res	rare		yes	sr	unc			yes
White gyrfalcon									
Gyrfalcon									
Black gyrfalcon									
Duck hawk	sr	rare, local		16 May '96		rare			
Pigeon hawk	tv, sr	unc, rare		yes	sr	rare			yes
American sparrow hawk	sr	unc		yes	sr	fc			yes
American osprey	sr	unc		yes	tv, sr	fc, oc	Apr. 25		
American barn owl									
American long-eared owl	res	fc		yes	res	unc			
Short-eared owl					tv				

JEFFERSON				KINGS—QUEENS—NASSAU						
ent ent	Common or rare	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds
	fc		yes	sr	fc	Apr. 22			Nov. 18	
	fc		yes	sr	fc					yes
	unc, c		yes	tv, sr	c			July 21		Apr. 28
				sv	oc	3 Aug. '82			1 Oct. '97	
				sv	rare	May 16, July 1			Aug	
				sv	oc	Apr. 3			Aug. 17	
	unc		May, June	sr	c	May				yes
				sr	c, local	Apr. 10, May 1			Oct. 10	yes
				av		1893				
				sr, wv	c, oc	Apr. 28			Nov. 9, 25, Dec. 5	yes
	c		yes	sr	c	Apr. 24				yes, June 24
	c		yes	sr	fc	May 3, 9			Oct.	yes
				tv	rare			1 Oct. '00	Oct. 15	
				tv	rare			Aug. 1		
				sr	local					yes
	unc		yes	tv, sr	c, oc	Apr.				
				tv	unc	May		Aug	Nov	
				tv	fc	May 24		Sept	Oct	
				tv	rare				Oct. 3, 10	
	fc		yes	sr	fc	Apr. 21			Nov. 17	yes
	c			tv, wv	c, rare	Mar. 25, Apr. 3	May	Aug. 7, Sept. 1, 15	Nov. 15, 25, Jan. 1	
				tv	c	May 23, 25	May 30	July 4, 21	Sept. 11	
				tv	unc			Sept. 25, Oct 9	Oct. 17, Nov. 2	
				tv	unc	May		July 16, 20	Sept. 7, Oct. 5	
				tv	fc	May 17, 20	June 7	July 26, Aug. 11	Oct. 2, 10, 26	
				wv	rare		Feb	Nov. 27		
				tv	c, fall	Apr.		July 21, 29	Oct. 10, 30	
				tv	fc			July 4, Aug	Sept. 25	
				tv	oc	May 2		Aug. 26, Sept	Sept. 29	
				tv	c	Apr. 28, May 5	May 23, 30	July 6, 16, 20	Sept. 14, 29, Oct. 5	
				tv, wv	c, fall; rare	Apr. 6, 15	May 26, June 6	Sept. 1, 23	Oct. 19, Nov. 13, Jan. 13	
				tv	c	Apr. 28, May 1, 6	May 30, June 3	July 4, 21	Oct. 8, 15	
				tv	oc			July 17, 29	Aug. 28, 29	
				tv	fc	Mar. 19, 29, Apr. 5	May 24, 31, June 12	Aug. 2, 8, 17	Oct. 24, Nov. 1	
				tv	rare					
				tv	rare			Aug. 25		
				tv	c	Apr. 4, 28	May 25, 30, June 22	July 15, 29, Aug. 7	Oct. 17, 26, Nov. 24	
				tv	fc	Apr. 3, May 6	May 26	July 7, 21	Sept. 8, 21, Oct. 1	
	fc			tv	c	May 5, 10, 16	May 14, 21, 28	July 15, 31, Aug. 10	Sept. 22, Oct. 1, 10	
				tv	oc			July 11	Aug	
	rare		yes	tv, sr	fc, rare	May 20	June 1		Sept. 10, 17	
				tv	rare			Aug. 25, 31	Sept. 13, 17	
	c, May 1		yes	sr	ab	Apr. 26, 28, May 2			Sept. 13, 21, Oct. 8	May 10, June 5
				tv	rare			July 21, Aug. 20	Aug. 26	
				tv	fc, fall	May 23	May 30	July 11, 18	Sept. 9, 16	
				tv	rare			Sept. 10, 13	Sept. 26, 30	
				av	once				Dec. '83	
				tv	fc	May 6, 12	May 23, June 7	July 25, Aug. 4, 8	Oct. 2, 12, Nov. 1	
	c	Oct. 15, 28		tv		May 10		Aug. 6, 17, 24	Oct. 1, 24, Nov. 1	
	fc		yes	tv, sr	fc, rare	Mar. 5, 19	June 2, 5	July 19, 30, Aug. 4	Nov. 1, 10, Dec. 5	
	fc			tv	c	May 2, 11, 12	May 30	July 30, Aug. 16	Sept. 12, 17, Oct. 1	
				sr	rare	Mar. 24, Apr. 4			Sept	
				sv	rare	May 17			July 1	
				tv	c	May 9, 12, 19	May 23, June 1, 10	July 26, Aug. 3, 9	Aug. 29, Sept. 8, Oct. 2	
				av	once	28 May '77				
				res	c					yes
	fc		yes	res	fc, local					yes
				1889 (last)						
				sr	fc	Mar. 27				yes
				sv	oc	May 16, June 9, July 19			Aug. 15, 26, Sept. 5	
				av	once					
				av						
	c		yes	sr, wr	fc, c	Mar. 26				yes
	c			sr	c					yes
	unc		yes	sr, tv	fc					yes
				wv	rare			Nov., Dec. 18		
	c		yes	wv, res	c, unc					
	ab		yes	tv, sr	c, unc					yes
	rare		yes	tv, sr	c					
				wv	oc			Nov. 18		
					rare			6 Oct. '77		
	fc		yes	tv, wv	oc, rare					
				wv	rare					
				tv	oc			Sept. 17		
				tv	fc	Apr. 13, May 3	May 8	Sept. 6, 17, 23	Oct. 9	
	fc		yes	tv, sr	c, fc	Apr. 1, 2			Sept. 17, 21	yes
	fc			sr	fc	Mar. 29			Sept. 4	yes
				res	rare					yes
	unc			res	oc	Mar. 26			Jan. 4	Apr
				tv, wr	fc, fc			Oct. 9, 14, Nov. 28		

SPECIES RECORDED	HAMILTON				HERKIMER					JEFFERSON			
	Resident or transient	Common or rare	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Departs for south	Breeds	Resident or transient	Common or rare	Departs for south	Breeds
Wood ibis													
American bittern	sr	unc		June 10	sr	fc			June 1, 10	s	fc		yes
Least bittern										s	fc		yes
Great blue heron	sr	c		yes	sr	unc	Apr. 8	Oct. 21	yes	s, tv	unc, c		yes
American egret					sv	rare	spring '82						
Snowy heron													
Louisiana heron													
Little blue heron													
Green heron	sr	unc			sr		May	Oct. 1	June 10	s	unc		May, June
Black-crowned night heron					sr		May 20						
Yellow-crowned night heron													
Whooping crane													
Sandhill crane													
King rail													
Clapper rail													
Virginia rail					sr				yes	s	c		yes
Sora					sr				yes	s	c		yes
Yellow rail													
Black rail													
Corn crake													
Purple gallinule													
Florida gallinule										s			
American coot	tv	fc			sr	oc			7		unc		yes
Red phalarope	tv	rare	25 Sept. '04		tv	rare		Sept. 25					
Northern phalarope	tv	rare	Sept. '06										
Wilson phalarope													
American avocet													
Black-necked stilt													
American woodcock	sr	unc		yes	sr	fc	Mar. 10	Nov. 15	Apr. 20	s	fc		yes
Wilson snipe	tv	rare	Oct. 7		tv		Mar. 28	Nov. 10		tv			
Dowitcher													
Long-billed dowitcher													
Stilt sandpiper													
Knot													
Purple sandpiper													
Pectoral sandpiper					tv					tv			
White-rumped sandpiper													
Baird sandpiper													
Least sandpiper					tv					tv			
Dunlin													
Red-backed sandpiper										tv			
Curlew sandpiper													
Semipalmated sandpiper										h			
Western sandpiper													
Sanderling													
Marbled godwit													
Hudsonian godwit													
Greater yellow-legs	tv				tv					tv			
Yellow-legs	tv				tv					tv			
Solitary sandpiper	sr	unc			sr	unc	May 1			tv	fc		
Willet													
Ruff													
Bartramian sandpiper					sr		Apr. 13	Sept. 1	yes	s	rare		
Buff-breasted sandpiper													
Spotted sandpiper	sr	c		yes	sr	c	Apr. 24, 30	Aug. 27, Sept. 10, Oct. 10	yes	s	c, May 1		yes
Long-billed curlew													
Hudsonian curlew													
Eskimo curlew													
European curlew													
Lapwing													
Black-bellied plover					tv								
American golden plover					tv					tv			
Killdeer	tv	unc			sr		Apr. 4, 13	Nov. 10	yes	s	fc	Oct. 15, 28	
Semipalmated plover										tv	fc		yes
Piping plover													
Wilson plover													
Turnstone													
American oyster catcher													
Bobwhite													
Canada grouse	res	rare											
Ruffed grouse					res	rare			yes	res			
Canadian ruffed grouse	res	c		yes	res	c			yes		fc		yes
Willow ptarmigan													
Heath hen													
Wild turkey													
Ring-necked pheasant													
Passenger pigeon	former sr	irreg							1882 (last)				
Mourning dove					sr		Apr. 15						
Ground dove													
Turkey vulture													
Black vulture													
Swallow-tailed kite													
Marsh hawk	sr	unc		yes	sr	c				s	c		
Sharp-shinned hawk	sr	fc		yes	tv, sr	c, rare				s	c		
Cooper hawk	sr	unc		yes	sr				yes	s	unc		
American goshawk	res	rare		1898						s			
Red-tailed hawk	sr	c		yes	sr				yes	s	c		
Red-shouldered hawk	sr	fc		yes	res				Apr. 22, May 15	s	ab		
Swainson hawk													
Broad-winged hawk	sr	fc		May 19, June 15	sr				May 10, June 15	s	rare		
American rough-legged hawk					wv					wv			
Golden eagle													
Bald eagle	res	rare		yes	tv	rare	23 Oct. '85	15 Sept. '87	yes	sr	fc		
White gyrfalcon					sr	unc							
Gyrfalcon													
Black gyrfalcon													
Duck hawk	sr	rare, local		16 May '06		rare				tv			
Pigeon hawk	tv, sr	unc, rare		yes	sr	rare			yes	s			
American sparrow hawk	sr	unc		yes	sr	fc			yes	w			
American osprey	sr	unc		yes	tv, sr	fc, oc	Apr. 25						
American barn owl										res			
American long-eared owl	res	fc		yes	res	unc					unc		
Short-eared owl					tv								

SPECIES RECORDED	KINGS—QUEENS—NASSAU						
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds
Wood ibis							
American bittern	sr	fc	Apr. 22			Nov. 18	
Least bittern	sr	fc					yes
Great blue heron	tv, sr	c			July 21		Apr. 28
American egret	sv	oc	3 Aug. '82			1 Oct. '97	
Snowy heron	sv	rare	May 16, July 1			Aug	
Louisiana heron							
Little blue heron	sv	oc	Apr. 3			Aug. 17	
Green heron	sr	c	May				yes
Black-crowned night heron	sr	c, local	Apr. 10, May 1			Oct. 10	yes
Yellow-crowned night heron	av		1893				
Whooping crane							
Sandhill crane							
King rail							
Clapper rail	sr, wv	c, oc	Apr. 28			Nov. 9, 25, Dec. 5	yes
Virginia rail	sr	c	Apr. 24				yes, June 24
Sora	sr	fc	May 3, 9			Oct.	yes
Yellow rail	tv	rare			1 Oct. '00	Oct 15	
Black rail	tv	rare			Aug. 1		
Corn crake							
Purple gallinule							
Florida gallinule	sr	local					yes
American coot	tv, sr	c, oc	Apr.				
Red phalarope	tv	unc	May		Aug	Nov	
Northern phalarope	tv	fc	May 24		Sept	Oct	
Wilson phalarope	tv	rare				Oct. 3, 10	
American avocet							
Black-necked stilt							
American woodcock	sr	fc	Apr. 21			Nov. 17	yes
Wilson snipe	tv, wv	c, rare	Mar. 25, Apr. 3	May	Aug 7, Sept. 1, 15	Nov. 15, 25, Jan. 1	
Dowitcher	tv	c	May 23, 25	May 30	July 4, 21	Sept. 11	
Long-billed dowitcher	tv	unc			Sept. 25, Oct 9	Oct. 17, Nov. 2	
Stilt sandpiper	tv	unc	May		July 16, 20	Sept. 7, Oct. 5	
Knot	tv	fc	May 17, 20	June 7	July 26, Aug 11	Oct. 2, 10, 26	
Purple sandpiper	wv	rare		Feb	Nov. 27		
Pectoral sandpiper	tv	c, fall	Apr.		July 21, 29	Oct. 10, 30	
White-rumped sandpiper	tv	fc			July 4, Aug	Sept. 25	
Baird sandpiper	tv	oc	May 2		Aug. 26, Sept	Sept. 29	
Least sandpiper	tv	c	Apr. 28, May 5	May 23, 30	July 6, 16, 20	Sept. 14, 29, Oct. 5	
Dunlin							
Red-backed sandpiper	tv, wv	c, fall; rare	Apr. 6, 15	May 26, June 6	Sept. 1, 23	Oct. 19, Nov. 13, Jan. 13	
Curlew sandpiper							
Semipalmated sandpiper	tv	c	Apr. 28, May 1, 6	May 30, June 3	July 4, 21	Oct. 8, 15	
Western sandpiper	tv	oc			July 17, 29	Aug. 28, 30	
Sanderling	tv	fc	Mar. 10, 29, Apr. 5	May 24, 31, June 12	Aug. 2, 8, 17	Oct. 24, Nov. 1	
Marbled godwit	tv	rare					
Hudsonian godwit	tv	rare			Aug. 25		
Greater yellow-legs	tv	c	Apr. 4, 28	May 25, 30, June 22	July 15, 20, Aug. 7	Oct. 17, 26, Nov. 24	
Yellow-legs	tv	fc	Apr. 3, May 6	May 26	July 7, 21	Sept. 8, 21, Oct. 1	
Solitary sandpiper	tv	c	May 5, 10, 16	May 14, 21, 28	July 15, 31, Aug. 10	Sept. 22, Oct. 1, 10	
Willet	tv	oc			July 11	Aug	
Ruff							
Bartramian sandpiper	tv, sr	fc, rare	May 20	June 1		Sept. 10, 17	
Buff-breasted sandpiper					Aug. 25, 31	Sept. 13, 17	
Spotted sandpiper	sr	ab	Apr. 26, 28, May 2			Sept. 13, 21, Oct. 8	May 10, June 5
Long-billed curlew	tv	rare			July 21, Aug. 20	Aug. 26	
Hudsonian curlew	tv	fc, fall	May 23	May 30	July 11, 18	Sept. 9, 16	
Eskimo curlew	tv	rare			Sept. 10, 13	Sept. 26, 30	
European curlew							
Lapwing						Dec. '83	
Black-bellied plover	av	once				Oct. 2, 12, Nov. 1	
American golden plover	tv	fc	May 6, 12	May 23, June 7	July 25, Aug. 4, 8	Oct. 1, 24, Nov. 1	
Killdeer	tv		May 10		Aug. 6, 17, 24	Nov. 1, 10, Dec. 5	
Semipalmated plover	tv, sr	fc, rare	Mar. 5, 19	June 2, 5	July 19, 30, Aug. 4	Sept. 12, 17, Oct. 1	
Piping plover	tv	c	May 2, 11, 12	May 30	July 30, Aug. 16	Sept	
Wilson plover	sr	rare	Mar. 24, Apr. 4			July 1	
Turnstone	sv	rare	May 17			Aug. 29, Sept. 8, Oct. 2	
American oyster catcher	tv	c	May 9, 12, 19	May 23, June 1, 10	July 26, Aug. 3, 9		
Bobwhite	av	once	28 May '77				yes
Canada grouse	res	c					
Ruffed grouse	res						yes
Canadian ruffed grouse	res	fc, local					
Willow ptarmigan							
Heath hen							
Wild turkey							
Ring-necked pheasant							
Passenger pigeon							yes
Mourning dove	1889 (last)						
Ground dove	sr	fc	Mar. 27			Aug. 15, 26, Sept. 5	
Turkey vulture							
Black vulture	sv	oc	May 16, June 9, July 10				
Swallow-tailed kite	av	once					yes
Marsh hawk	av						yes
Sharp-shinned hawk	sr, wr	fc, c	Mar. 26				yes
Cooper hawk	sr	c					
American goshawk	sr, tv	fc			Nov., Dec. 18		
Red-tailed hawk	wv	rare					yes
Red-shouldered hawk	wv, res	c, unc					
Swainson hawk	tv, sr	c, unc					
Broad-winged hawk							
American rough-legged hawk	tv, sr	c			Nov. 18		
Golden eagle	wv	oc			6 Oct. '77		
Bald eagle		rare					
White gyrfalcon	tv, wv	oc, rare					
Gyrfalcon							
Black gyrfalcon							
Duck hawk	wv	rare			Sept. 17		
Pigeon hawk	tv	oc		May 8	Sept. 6, 17, 23	Oct. 9	
American sparrow hawk	tv	fc	Apr. 13, May 3			Sept. 17, 21	yes
American osprey	tv, sr	c, fc	Apr. 1, 2			Sept. 4	yes
American barn owl	sr	fc	Mar. 29				yes
American long-eared owl	res	rare			Oct. 9, 14, Nov. 28	Jan. 4	Apr.
Short-eared owl	tv, wr	fc, fc	Mar. 20				

SPECIES RECORDED	LEWIS							LIVINGSTON				
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Departs for south	Br
Wood ibis												
American bittern	sr.	fc	Apr. 1, May 1, 11			Sept	yes	sr.				yes
Least bittern								sr.	unc			yes
Great blue heron	tv, sr.	c, unc	Mar. 16, Apr. 1, 12			Sept. 2, Oct. 8	yes	tv	fc			
American egret												
Snowy heron												
Louisiana heron												
Little blue heron												
Green heron	sr.	unc				Aug. 9, Sept. 1	yes	sr.	fc			yes
Black-crowned night heron												
Yellow-crowned night heron												
Whooping crane												
Sandhill crane												
King rail												
Clapper rail												
Virginia rail	sr.	rare				Aug. 2		sr.	fc			yes
Sora	sr.	unc				Sept. 25	yes	sr.	fc			yes
Yellow rail												
Black rail												
Corn crake												
Purple gallinule												
Florida gallinule												
American coot	sr.	oc	Apr. 18					tv	unc			
Red phalarope												
Northern phalarope												
Wilson phalarope												
American avocet												
Black-necked stilt												
American woodcock	sr.	fc	Apr. 3, 13, 24			Sept. 11, Oct. 16	yes	sr.	fc			yes
Wilson snipe	tv	fc						tv	unc			
Dowitcher												
Long-billed dowitcher												
Stilt sandpiper												
Knot												
Purple sandpiper												
Pectoral sandpiper	tv							tv				
White-rumped sandpiper												
Baird sandpiper	tv	rare				11 Aug. '85						
Least sandpiper	tv							tv				
Dunlin												
Red-backed sandpiper	tv											
Curlew sandpiper												
Semipalmated sandpiper	tv							tv				
Western sandpiper												
Sanderling	tv											
Marbled godwit												
Hudsonian godwit												
Greater yellow-legs	tv					Oct. 20		tv				
Yellow-legs	tv	unc	May 10					tv				
Solitary sandpiper	sr.	unc	May 13			Aug. 14, Sept. 4		tv				
Willet												
Ruff												
Bartramian sandpiper	tv, sr.	oc				July	yes	sr.		Apr. 25	Sept. 25	yes
Buff-breasted sandpiper												
Spotted sandpiper	sr.	c	Apr. 23, 26			Sept	yes	sr.	c	Apr. 21		yes
Long-billed curlew												
Hudsonian curlew												
Eskimo curlew												
European curlew												
Lapwing												
Black-bellied plover												
American golden plover												
Killdeer	sr.	c	Mar. 26, Apr. 20				yes	sr.	c	Mar.		yes
Semipalmated plover	tv					Aug. 16		tv				
Piping plover												
Wilson plover												
Turnstone												
American oyster catcher												
Bobwhite								res	formerly			
Canada grouse		rare										
Ruffed grouse	res	fc					yes	res	c			yes
Canadian ruffed grouse												
Willow ptarmigan	av	22 May '76										
Heath hen												
Wild turkey												
Ring-necked pheasant												
Passenger pigeon	1896 (last)	rare	Mar. 3, Apr. 7, 20			Sept. 10, Oct.				1884 (last)		
Mourning dove		rare						sr.	c	Apr. 1		yes
Ground dove												
Turkey vulture												
Black vulture												
Swallow-tailed kite												
Marsh hawk	sr.	c	Apr. 1			Aug. 23, Sept. 24	yes	sr.				yes
Sharp-shinned hawk	tv, sr.	c, oc	Apr. 12, 13			Sept. 20, Oct.	yes	sr.				yes
Cooper hawk	sr.	fc	Apr. 12			Sept. 18, 28	yes	sr.				yes
American goshawk	wv	irreg		Jan.	Oct.							
Red-tailed hawk	sr.	c	Mar., Apr. 8			Oct. 13	yes	res	c			yes
Red-shouldered hawk	sr.	c	Mar. 19, 20, 28			Oct. 6, 10	yes	sr.				yes
Swainson hawk												
Broad-winged hawk	sr.	c	Feb. 13			Aug. 17	yes	sr.				yes
American rough-legged hawk	tv	unc	Apr. 4, 6, 16		Sept. 29, Oct. 10	Nov. 8, Dec. 21						
Golden eagle												
Bald eagle	tv	unc						tv				
White gyrfalcon												
Gyrfalcon												
Black gyrfalcon												
Duck hawk	tv	rare										
Pigeon hawk	tv	rare	Apr. 11			Sept. 10, 28		tv		Apr. 1	Oct.	
American sparrow hawk	sr.	c	Mar. 3, Apr. 2, 28			Sept. 2, Oct. 13	yes	sr.	fc			yes
American osprey	tv	fc	Apr. 12, 16, May 1			Oct. 6		tv				
American barn owl								sr, res.	?			Ma
American long-eared owl	res.	fc						res	fc			yes
Short-eared owl	tv	rare						tv				

a Extirpated 80 years ago.

MADISON							MONROE						
ident	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds
	c	May 1			Nov. 6	yes	sr	c	Apr. 7, 23			Nov. 10	yes
	rare						sr	c	May 10, 15			Sept. 10, 30	June 10
	c, oc						sr, tv, res	fc, c, oc	Mar. 20, 30			Nov. 28	yes
	c	May 1			Oct. 2	yes	sr	c	Apr. 24, May 5			Oct. 10	yes
	oc						tv	unc		26 May '91	Sept. 20, 30	Oct.	
							av	once					
							av	once		15 Oct. '85			
							sr	rare				Oct. '90	
	fc					yes	sr	fc	Apr. 20, May 3			Oct. 15, 25	yes
	ab, fc			Sept. 1	Oct. 5		sr	c	Apr. 25, May 3			Oct. 10	yes
							tv, sr	unc, rare	Apr.	June '80	Sept.	Oct. 21	
							av	once				Oct '92	
	unc					yes	sr	fc	Apr.			Oct.	yes
	fc					yes	tv	c	Apr. 1, 20		Sept. 15, 25	Nov. 1, 10	
							tv				19 Sept. '91		
	rare			6 Oct. '83			tv	once			Sept. '82		
	unc					yes	sr, tv	unc, fc	Mar., Apr. 13			Nov.	Apr. 6
	c	Apr. 5		Sept. 19	Dec. 1, 10		tv, sr	c, oc	Mar. 30, Apr. 10	Apr. 30	Sept. 1, 16	Oct. 18, 30	
				22 Sept. '83			tv	unc	May 10				
				22 Sept. '83			tv	oc					
							tv	once					
	fc			Aug. 25	Oct. 1		tv	c	Apr. 15		Sept.	Oct.	
							tv	unc			Sept. 10, 20		
	fc			Sept. 1	Oct. 1		tv	unc			Sept. 8	Oct. 18	
	fc			Aug. 10	Sept. 25		tv	c	Apr. 20	May 12	July 29, Aug. 10	Sept	
				Oct. 5			tv	fc	May 14		Sept. 15	Oct. 30	
	c			Aug. 25	Nov. 1		tv	c			Sept. 1	Oct.	
							tv	unc					
	c			Sept. 1			tv	fc	May		Sept. 1, 25	Oct. 3, 15	
							tv	rare			Oct. '88		
	once			7 Sept. '91			tv	rare			Sept. '90		
	oc						tv	fc	Apr. 12	May 10	Aug. 15, Sept. 10	Oct.	
	fc						tv	fc	May 6		July 29, Aug. 15	Sept. 18, Oct. 26	
	c	Apr. 20	May 15	Aug. 25	Oct. 10		tv	fc	Apr. 29, May 5	May 17, 25	July 20, Aug. 10	Sept. 5, 15	
							tv	rare			12 Sept. '85		
	fc					yes	sr	local	Apr. 20			Sept. 5	yes, May 10
							tv	rare			Sept. '86		
	c	Apr. 27				yes	sr	c	Apr. 24, 30			Sept. 4, 30	yes
							tv	rare			10 Sept. '89	10 Oct. '80	
							tv	once	8 May '87				
							tv	fc			Sept. 15	Nov. 1	
	rare			Sept. 28			tv	fc			Sept. 15	Nov. 1, 10	
	c	Mar. 13				yes	sr	c	Mar. 12, 22			Oct. 16	yes
	c			Aug. 15	Sept. 28		tv	c	May 15		Aug. 20	Sept. 30	
							tv	oc					
	rare	1885					tv	unc	25 May '05		Oct. 6		
	rare					yes	res	rare					yes
	c					May 5	res	fc					May 10
							res	unc					
							a						
							res	c					yes
		10 Apr. '00		Sept. '86, '95					20 Sept. '99 (last)				
	fc	Apr. 8				yes	sr	fc	Mar. 25, Apr. 5			Oct., Nov.	yes
							sv	oc					
	c					yes	sr, tv	fc, c	Mar. 20, Apr. 7			Nov., Dec. 23	yes
	fc					yes	sr, tv	fc, ab	Apr. 7, 20	May 10	Aug.	Oct., Nov.	yes
	fc					yes	sr, tv	fc, c	Mar. 20, Apr. 7				yes
	rare						wv, tv	unc, fc	Mar. 20	Apr. 5	Nov. 20, Dec. 10		
s	c, oc					yes	res, tv	fc, c					yes
	c					yes	sr	fc					yes
							av	once			1 Oct. '89		
	fc					yes	sr, tv	rare, c	Apr. 19, 30	May 10, 30			yes
							wv	irreg		Apr.	Oct.		
		May '96					av	twice			25 Oct. '00		
	unc					yes	res, tv	rare, unc					
							av	once			Oct. '90		
	rare			Oct. 2			tv	rare					
	rare			Oct. 2			tv	unc	Apr. 10, 30	May 4, 14	Sept. 20, Oct. 10	Nov.	
s	c, oc					yes	sr, res	fc, oc	Mar. 24, 30			Oct., Nov.	yes
	oc	Apr. 12, 20					tv	fc	Mar. 19, Apr. 15	May 10, 15	Sept. 11	Oct.	
							av					Sept. '99	
	c					yes	res	unc					22 Apr. '91
	fc					yes	res, tv	unc, fc					yes

SPECIES RECORDED	LEWIS							LIVINGSTON					MADISON							MONROE						
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds
Wood ibis																										
American bittern	sr	fc	Apr. 1, May 1, 11			Sept	yes	sr				yes	sr	c	May 1			Nov. 6	yes	sr	c	Apr. 7, 23			Nov. 10	yes
Least bittern								sr	unc			yes	sr	rare						sr	c	May 10, 15			Sept. 10, 30	June 10
Great blue heron	tv, sr	c, unc	Mar. 16, Apr 1, 12			Sept. 2, Oct. 8	yes	tv	fc				sr, res	c, oc						sr, tv, res	fc, c, oc	Mar. 20, 30			Nov. 28	yes
American egret																										
Snowy heron																										
Louisiana heron																										
Little blue heron																										
Green heron	sr	unc				Aug. 9, Sept. 1	yes	sr	fc			yes	sr	c	May 1			Oct. 2	yes	sr	c	Apr. 24, May 5			Oct 10	yes
Black-crowned night heron													tv	oc						tv	unc		26 May '91	Sept. 20, 30	Oct	
Yellow-crowned night heron																				av	once					
Whooping crane																										
Sandhill crane																				av	once		15 Oct. '85			
King rail																				sr	rare				Oct. '90	
Clapper rail																										
Virginia rail	sr	rare				Aug. 2		sr	fc			yes	sr	fc					yes	sr	fc	Apr. 20, May 3			Oct 15, 25	yes
Sora	sr	unc				Sept. 25	yes	sr	fc			yes	tv, sr	ab, fc			Sept. 1	Oct. 5		sr	c	Apr. 25, May 3			Oct. 10	yes
Yellow rail																				tv, sr	unc, rare	Apr	June '80	Sept	Oct 21	
Black rail																				av	once				Oct '92	
Corn crake																										
Purple gallinule																										
Florida gallinule													sr	unc					yes	sr	fc	Apr			Oct	yes
American coot	sr	oc	Apr. 18					tv	unc				tv, sr	fc					yes	tv	c	Apr. 1, 20		Sept. 15, 25	Nov. 1, 10	
Red phalarope																										
Northern phalarope																				tv				19 Sept. '91		
Wilson phalarope													tv	rare			6 Oct. '83			tv	once			Sept. '82		
American avocet																										
Black-necked stilt																										
American woodcock	sr	fc	Apr. 3, 13, 24			Sept. 11, Oct. 16	yes	sr	fc			yes	sr	unc					yes	sr, tv	unc, fc	Mar., Apr. 13			Nov	Apr. 6
Wilson snipe	tv	fc						tv	unc				tv	c	Apr. 5		Sept. 19	Dec. 1, 10		tv, sr	c, oc	Mar. 30, Apr. 10	Apr. 30	Sept. 1, 10	Oct. 18, 30	
Dowitcher													tv				22 Sept. '83			tv	unc	May 10				
Long-billed dowitcher																										
Stilt sandpiper																										
Knot													tv				22 Sept. '83			tv	oc					
Purple sandpiper																				tv	once					
Pectoral sandpiper	tv							tv					tv	fc			Aug. 25	Oct. 1		tv	c	Apr. 15		Sept	Oct	
White-rumped sandpiper																				tv	unc			Sept. 10, 20		
Baird sandpiper	tv	rare				11 Aug. '85							tv	fc			Sept. 1	Oct. 1		tv	unc			Sept. 8	Oct. 18	
Least sandpiper	tv							tv					tv	fc			Aug. 10	Sept. 25		tv	c	Apr. 20	May 12	July 29, Aug. 10	Sept	
Dunlin																										
Red-backed sandpiper	tv												tv				Oct. 5			tv	fc	May 14		Sept. 15	Oct. 30	
Curlew sandpiper																										
Semipalmated sandpiper	tv							tv					tv	c			Aug. 25	Nov. 1		tv	c			Sept. 1	Oct	
Western sandpiper																				tv	unc					
Sanderling	tv												tv	c			Sept. 1			tv	fc	May		Sept. 1, 25	Oct. 3, 15	
Marbled godwit																				tv	rare			Oct. '88		
Hudsonian godwit													tv	once			7 Sept. '91			tv	rare			Sept. '90		
Greater yellow-legs	tv					Oct. 20		tv					tv	oc						tv	fc	Apr. 12	May 10	Aug. 15, Sept. 10	Oct	
Yellow-legs	tv	unc	May 10					tv					tv	fc						tv	fc	May 0		July 29, Aug. 15	Sept. 18, Oct. 20	
Solitary sandpiper	sr	unc	May 13			Aug. 14, Sept. 4		tv					tv	c	Apr. 20	May 15	Aug. 25	Oct. 10		tv	fc	Apr. 29, May 5	May 27, 25	July 20, Aug. 10	Sept. 5, 15	
Willet																				tv	rare			12 Sept. '85		
Ruff																										
Bartramian sandpiper	tv, sr	oc				July	yes	sr		Apr. 25	Sept 25	yes	sr	fc					yes	sr	local	Apr. 20			Sept. 5	yes, May 10
Buff-breasted sandpiper																				tv	rare			Sept. '86		
Spotted sandpiper	sr	c	Apr. 23, 26			Sept	yes	sr	c	Apr. 21		yes	sr	c	Apr. 27				yes	sr	c	Apr. 24, 30			Sept. 4, 10	yes
Long-billed curlew																										
Hudsonian curlew																				tv	rare			10 Sept. '89	10 Oct. '80	
Eskimo curlew																				tv	once	8 May '87				
European curlew																										
Lapwing																										
Black bellied plover																				tv	fc			Sept. 15	Nov. 1	
American golden plover													tv	rare			Sept. 28			tv	fc			Sept. 15	Nov. 1, 10	
Killdeer	sr	c	Mar. 26, Apr. 20				yes	sr	c	Mar		yes	sr	c	Mar. 13				yes	sr	c	Mar. 12, 22			Oct. 16	yes
Semipalmated plover	tv					Aug. 16		tv					tv	c			Aug. 15	Sept. 28		tv	c	May 15		Aug. 20	Sept. 30	
Piping plover																				tv	oc					
Wilson plover																										
Turnstone													tv	rare	1885					tv	unc	25 May '05		Oct. 6		
American oyster catcher																										yes
Bobwhite								res	formerly				res	rare					yes	res	rare					
Canada grouse		rare																								May 10
Ruffed grouse	res	fc					yes	res	c			yes	res	c					May 5	res	fc					
Canadian ruffed grouse																				res	unc					
Willow ptarmigan	av	22 May '70																								
Heath hen																										
Wild turkey																				g						yes
Ring-necked pheasant																				res	c					
Passenger pigeon	1896 (last)	rare	Mar. 3, Apr 7, 20			Sept. 10, Oct				1884 (last)			tv									20 Sept. '99 (last)			Oct, Nov	yes
Mourning dove		rare										yes	sr	fc	10 Apr. '00, Apr. 8		Sept. '80, '95		yes	sr	fc	Mar. 25, Apr. 5				
Ground dove								sr	c	Apr. 1																
Turkey vulture																				sv	oc					
Black vulture																										
Swallow-shinned kite																									Nov., Dec. 23	yes
Marsh hawk	sr	c	Apr. 1									yes	sr	c								Mar. 20, Apr. 7			Oct., Nov	yes
Sharp-shinned hawk	tv, sr	c, oc	Apr. 12, 13			Aug. 23, Sept. 24	yes	sr				yes	sr	fc					yes	sr, tv	fc, c	Apr. 7, 20	May 10	Aug		yes
Cooper hawk	sr	fc	Apr. 12			Sept. 20, Oct	yes	sr				yes	sr	fc					yes	sr, tv	fc, ab	Mar. 20, Apr. 7				
American goshawk	wv	irreg				Sept. 18, 28	yes	sr						rare					yes	sr, tv	fc, c	Mar. 20	Apr. 5	Nov. 20, Dec 10		
Red-tailed hawk	sr	c	Mar., Apr 8	Jan	Oct	Oct. 13	yes	res	c			yes	sr, res	c, oc						wv, tv	unc, fc					yes
Red-shouldered hawk	sr	c	Mar. 19, 20, 28			Oct. 6, 10	yes	sr				yes	res	c					yes	res, tv	fc, c					
Swainson hawk																			yes	sr	fc			1 Oct. '89		yes
Broad-winged hawk	sr	c	Feb 13			Aug. 17	yes	sr				yes	sr	fc						av	once		May 10, 30			
American rough-legged hawk	tv	unc	Apr. 4, 6, 16		Sept. 20, Oct. 10	Nov. 8, Dec. 21													yes	sr, tv	rare, c	Apr. 19, 30	Apr	Oct		
Golden eagle													av							wv	irreg			25 Oct. '00		
Bald eagle	tv	unc											sr	unc	May '96					av	twice					
White gyrfalcon								tv											yes	res, tv	rare, unc					
Gyrfalcon																								Oct. '90		
Black gyrfalcon																				av	once					
Duck hawk	tv	rare											tv	rare						tv	rare			Sept. 20, Oct. 10	Nov	
Pigeon hawk	tv	rare	Apr. 11			Sept. 10, 28		tv		Apr. 1	Oct		tv	rare			Oct. 2			tv	unc	Apr 10, 30	May 4, 14		Oct., Nov	yes
American sparrow hawk	sr	c	Mar 3, Apr 2, 28			Sept. 2, Oct. 13	yes	sr	fc			yes	sr, res	c, oc			Oct. 2			tv		Mar. 24, 30			Oct	
American osprey	tv	fc	Apr. 12, 16, May 1			Oct. 6		tv					tv	oc	Apr. 12, 20				yes	sr, res	fc, oc	Mar. 19, Apr 15	May 10, 15	Sept. 11	Sept. '90	
American barn owl								sr. res				Mar. 10								tv	fc					22 Apr. '98
American long-eared owl	res	fc						res	c			yes	res	c						av						yes
Short-eared owl	tv	rare						tv	fc				res	fc					yes	res, tv	unc					

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SPECIES RECORDED	MONTGOMERY			NEW YORK					NIAGARA				
	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Arrives from south	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Returns from north	Bree
Wood ibis													
American bittern	sr	unc		sr	unc				sr	c			yes
Least bittern				sr	c, local	May 21			sr	c			yes
Great blue heron	tv	unc		tv	c				sr	local	Mar. 20		yes
American egret				sv	rare				sv	oc	Aug. 18		
Snowy heron													
Louisiana heron													
Little blue heron													
Green heron	sr		yes	sr	fc				sr	c			yes
Black-crowned night heron				tv	c				tv	fc			
Yellow-crowned night heron													
Whooping crane													
Sandhill crane													
King rail				sr	rare				sr	rare			
Clapper rail				sr	c								
Virginia rail				sr	unc				sr	fc	Apr. 22, 30		yes
Sora				tv, sr	c, rare				sr	c	Apr. 22, May 23		yes
Yellow rail				tv	rare				tv	rare			
Black rail													
Corn crake													
Purple gallinule													
Florida gallinule				sr	local				sr	c			yes
American coot				tv	fc				tv, sr	c, fc			yes
Red phalarope													
Northern phalarope				tv	oc				tv	oc			
Wilson phalarope													
American avocet													
Black-necked stilt													
American woodcock	sr			tv, sr	fc, unc				sr	fc	Mar. 20, Apr. 22		yes
Wilson snipe				tv	fc				tv	c	Apr. 12, 17, 20		
Dowitcher				tv	fc				tv	rare			
Long-billed dowitcher				tv	rare								
Stilt sandpiper				tv	unc								
Knot				tv	fc								
Purple sandpiper													
Pectoral sandpiper				tv	c	May 16	Oct. 8		tv	c			
White-rumped sandpiper				tv	unc				tv	oc			
Baird sandpiper				tv	rare				tv	oc		Aug. 27	
Least sandpiper				tv	c	May 22			tv	c			
Dunlin													
Red-backed sandpiper				tv	c				tv	oc			
Curlew sandpiper													
Semipalmated sandpiper				tv	ab				tv	fc			
Western sandpiper				tv	unc				tv	oc			
Sanderling				tv	c				tv	unc			
Marbled godwit				tv	rare								
Hudsonian godwit				tv	rare				tv	rare			
Greater yellow-legs				tv	c				tv	fc	Apr. 17		
Yellow-legs				tv	c, fall				tv	c	Apr. 19, May 3, 5		
Solitary sandpiper				tv		May 1			tv	fc			
Willet				tv	rare				tv	fc, formerly			
Ruff													
Bartramian sandpiper				tv, sr	rare		Sept. 17	yes	sr	local	Apr. 20		yes
Buff-breasted sandpiper									tv	rare		31 Aug. '86	
Spotted sandpiper	sr	c	yes	sr	c	Apr. 21		yes	sr	c	Apr. 29, May 3, 9		yes
Long-billed curlew				tv	rare								
Hudsonian curlew				tv	rare				tv	oc			
Eskimo curlew									tv	rare		2 Oct. '79	
European curlew													
Lapwing													
Black-bellied plover				tv	fc				tv	fc		Sept. 8	
American golden plover				tv	fc, fall				tv	fc			
Killdeer				tv, sr	fc, rare				sr	c			yes
Semipalmated plover				tv	c	May 1, 22			tv	c			
Piping plover				sv	unc	May 22			tv	rare		20 Aug. '85	
Wilson plover													
Turnstone				tv	fc				tv	rare			
American oyster catcher													
Bobwhite				res	unc				res	rare			yes
Canada grouse													
Ruffed grouse	res		yes	res	formerly				res	rare			yes
Canadian ruffed grouse													
Willow ptarmigan													
Heath hen													
Wild turkey													
Ring-necked pheasant									res				yes
Passenger pigeon				tv	formerly						10 May '83 (last)		
Mourning dove	sr		yes	sr	c			yes	sr	c	Apr. 9		yes
Ground dove				av	twice								
Turkey vulture				sv	rare								
Black vulture													
Swallow-tailed kite													
Marsh hawk	sr		yes	tv, sr	c, rare				sr	unc			yes
Sharp-shinned hawk	sr			tv, sr	fc, rare				res	fc			yes
Cooper hawk	sr			tv, sr	fc, rare				res	fc			yes
American goshawk				wv	rare				wv	oc			
Red-tailed hawk	sr		yes	res	fc			yes	res	c			yes
Red-shouldered hawk	sr		yes	res	fc			yes	res	c			yes
Swainson hawk													
Broad-winged hawk				res	unc				sr, tv	fc			
American rough-legged hawk				wv	rare				wv	oc			
Golden eagle													
Bald eagle				tv	unc				res	rare			forme
White gyrfalcon													
Gyrfalcon													
Black gyrfalcon													
Duck hawk				tv, sr	unc, rare		Sept. 17		tv	rare			
Pigeon hawk				tv	c		Nov. 20		tv	unc			
American sparrow hawk	sr		yes	sr, res	unc, oc			yes	sr, res	c, oc			yes
American osprey				tv	fc	Apr. 9			tv, sr	fc, rare			yes
American barn owl					rare				av	Sept. '03			
American long-eared owl	res			res	rare				res	unc			yes
Short-eared owl	res			tv	fc				wv, res	c, oc			

ONEIDA						ONONDAGA						
lent r ient	Common or rare	Arrives from south	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds
	c				yes	sr	fc					yes, May 27
	local			Sept. 1	yes	sr	unc					yes
	unc, c	Apr. 4			yes	sr, tv	local, c					
	oc			10 Nov. '89		sv	oc				Sept. '95	
	c	Apr. 21, 29			yes	sr	c					yes
	unc	May 3	Aug. 12			tv	fc					
						sr	rare					
	fc					sr	unc					yes
	fc				yes	sr	fc					yes
	rare		Oct. 3									
	unc					sr	c					yes
	c					tv sr	c, oc					
	rare		Oct. 4									
	rare		Sept. 21			tv	rare				Sept. 2	
	6 Oct. '83					av	2 Sept. '86					
	unc				yes	sr	fc					yes
	c, oc				yes	tv, sr	c, oc	Feb. 26, Apr. 4, 7				
	rare		Sept. 22			tv	rare					
	rare		26 Aug. '91			tv	rare					
	c					tv	c			Sept. 16		
	fc		Sept.	Oct. 27		tv	rare					
	rare		Sept. 4			tv	rare			Aug. 27		
	fc					tv	ab					
	c					tv				Oct. 2	Oct. 16	
	c					tv	fc	May 26				
	fc					tv	unc			Aug. 12		
						tv	rare		June '76			
	rare		Sept. 7	Oct. 7		tv	rare			13 Oct. '83		
	fc	Apr. 13				tv	c			Oct. 16		
	c					tv	fc	Apr. 27, May 7			Sept. 25	
	c	May 3				tv	fc	May 7				
	c, local	Mar. 17, Apr. 13, 27			May 10		unc					
	ab	May 3			yes	sr	ab	Apr. 25, 28			Sept. 11	yes
	rare			5 Oct. '80								
	rare		5 Sept. '99			tv	rare					
						tv	rare			1873		
	oc					tv						
	oc					tv	unc					
	c	Mar. 18, Apr. 2			yes	sr	c					yes
						tv				Sept. 11		
						tv						
	rare					tv	rare	May 30				
	rare					res	rare					
	fc				yes	res	c					yes, May 12
		Aug. '99					rare					
	fc				yes	sr	fc					yes
		May '79	Aug. '96									
	c				yes	sr						yes
	unc	Apr. 12, 21			yes	sr	fc					yes
	unc	Apr. 3			yes	sr	c					yes
	oc					wv	rare			Oct. 30, Nov. 15		
	fc, oc				yes	sr, res	c, oc					yes
	c, oc				yes	sr, res	c, oc					yes
						av	once			Oct. '77		
	unc	Apr. 21			yes	sr	unc					
	oc					wv	oc					
	unc				yes	sr	unc					yes
			winter '95									
	rare	Apr. 15				tv	fc					
	c				yes	sr	c					yes
	unc	Apr. 7				tv	fc					
	once											
	fc				May 1, 15	res	fc					yes
	unc					res	fc					yes

SPECIES RECORDED	MONTGOMERY			NEW YORK					NIAGARA					ONEIDA						ONONDAGA						
	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Arrives from south	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Returns from north	Breeds	Resident or transient	Common or rare	Arrives from south	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds
Wood ibis																										
American bittern	sr	unc		sr	unc				sr	c					c				yes	sr	fc					yes, May 27
Least bittern				sr	c, local	May 21			sr	c			yes	sr	local			Sept. 1	yes	sr	unc					yes
Great blue heron	tv	unc		tv	c				sr	local	Mar. 20		yes	sr, tv	unc, c	Apr. 4			yes	sr, tv	local, c					
American egret				sv	rare				sv	oc	Aug. 18			sv	oc			10 Nov. '89		sv	oc				Sept. '95	
Snowy heron																										
Louisiana heron																										
Little blue heron																										
Green heron	sr		yes	sr	fc				sr	c																
Black-crowned night heron				tv	c				tv	fc			yes	sr	c	Apr. 21, 29			yes	sr	c					yes
Yellow-crowned night heron														tv	unc	May 3	Aug. 12			tv	fc					
Whooping crane																										
Sandhill crane																										
King rail				sr	rare				sr	rare																
Clapper rail				sr	c															sr	rare					
Virginia rail				sr	unc				sr	fc	Apr. 22, 30		yes	sr	fc					sr	unc					yes
Sora				tv, sr	c, rare				sr	c	Apr. 22, May 23		yes	sr	fc				yes	sr	fc					yes
Yellow rail				tv	rare				tv	rare				tv	rare		Oct. 3									
Black rail																										
Corn crake																										
Purple gallinule																										
Florida gallinule				sr	local				sr	c			yes	tv	unc					sr	c					yes
American coot				tv	fc				tv, sr	c, fc			yes	tv	c					tv sr	c, oc					
Red phalarope														tv	rare		Oct. 4									
Northern phalarope				tv	oc				tv	oc				tv	rare		Sept. 21			tv	rare				Sept. 2	
Wilson phalarope														av	6 Oct. '83					av	2 Sept. '86					
American avocet																										
Black-necked stilt																										
American woodcock	sr			tv, sr	fc, unc				sr	fc	Mar. 20, Apr. 22		yes	sr	unc				yes	sr	fc					yes
Wilson snipe				tv	fc				tv	c	Apr. 12, 17, 20			tv, sr	c, oc				yes	tv, sr	c, oc	Feb. 26, Apr. 4, 7				
Dowitcher				tv	fc				tv	rare				tv	rare		Sept. 22			tv	rare					
Long-billed dowitcher				tv	rare																					
Stilt sandpiper				tv	unc																					
Knot				tv	fc									tv	rare		26 Aug. '91			tv	rare					
Purple sandpiper																										
Pectoral sandpiper				tv	c	May 16	Oct. 8		tv	c				tv	c					tv	c			Sept. 16		
White-rumped sandpiper				tv	unc				tv	oc				tv	fc		Sept.	Oct. 27		tv	rare					
Baird sandpiper				tv	rare				tv	oc		Aug. 27		tv	rare		Sept. 4			tv	rare			Aug. 27		
Least sandpiper				tv	c	May 22			tv	c				tv	fc					tv	ab					
Dunlin																										
Red-backed sandpiper				tv	c				tv	oc				tv	c					tv				Oct. 2	Oct. 16	
Curlew sandpiper																										
Semipalmated sandpiper				tv	ab				tv	fc				tv	c					tv	fc	May 26				
Western sandpiper				tv	unc				tv	oc																
Sanderling				tv	c				tv	unc				tv	fc					tv	unc			Aug. 12		
Marbled godwit				tv	rare															tv	rare		June '76			
Hudsonian godwit				tv	rare				tv	rare				tv	rare		Sept. 7	Oct. 7		tv	rare			13 Oct. '83		
Greater yellow-legs				tv	c				tv	fc	Apr. 17			tv	fc	Apr. 13				tv	c			Oct. 16		
Yellow-legs				tv	c, fall				tv	c	Apr. 19, May 3, 5			tv	c					tv	fc	Apr. 27, May 7			Sept. 25	
Solitary sandpiper				tv		May 1			tv	fc				tv	c	May 3				tv	fc	May 7				
Willet				tv	rare				tv	fc, formerly																
Ruff																										
Bartramian sandpiper				tv, sr	rare		Sept. 17	yes	sr	local	Apr. 20		yes	sr	c, local	Mar. 17, Apr. 13, 27					unc					
Buff-breasted sandpiper									tv	rare		31 Aug. '86							May 10							
Spotted sandpiper	sr	c	yes	sr	c	Apr. 21		yes	sr	c	Apr. 29, May 3, 9		yes	sr	ab	May 3			yes	sr	ab	Apr. 25, 28			Sept. 11	yes
Long-billed curlew				tv	rare									tv	rare			5 Oct. '80								
Hudsonian curlew				tv	rare				tv	oc				tv	rare		5 Sept. '99			tv	rare			1873		
Eskimo curlew									tv	rare		2 Oct. '79								tv	rare					
European curlew																										
Lapwing																										
Black-bellied plover				tv	fc				tv	fc		Sept. 8		tv	oc					tv						
American golden plover				tv	fc, fall				tv	fc				tv	oc					tv	unc					yes
Killdeer				tv, sr	fc, rare				sr	c			yes	sr	c	Mar. 18, Apr. 2			yes	sr	c			Sept. 11		
Semipalmated plover				tv	c	May 1, 22			tv	c				tv						tv						
Piping plover				sv	unc	May 22			tv	rare		20 Aug. '85		av						tv						
Wilson plover														tv	rare					tv	rare	May 30				
Turnstone				tv	fc				tv	rare																
American oyster catcher														res	rare					res	rare					
Bobwhite				res	unc				res	rare			yes													
Canada grouse	res		yes	res	formerly				res	rare			yes	res	fc				yes	res	c					yes, May 12
Ruffed grouse																										
Canadian ruffed grouse																										
Willow ptarmigan																										
Heath hen																										
Wild turkey																										
Ring-necked pheasant																										
Passenger pigeon				tv	formerly				res				yes													
Mourning dove	sr		yes	sr	c			yes	sr	c	10 May '83 (last)		yes	sr	fc	Aug. '99			yes	sr	fc					yes
Ground dove				av	twice						Apr. 9															
Turkey vulture				sv	rare									av		May '79	Aug. '96									
Black vulture																										
Swallow-tailed kite														sr	c				yes	sr						yes
Marsh hawk	sr		yes	tv, sr	c, rare				sr	unc			yes	sr	unc	Apr. 12, 21			yes	sr	fc					yes
Sharp-shinned hawk	sr			tv, sr	fc, rare				res	fc			yes	wv	unc	Apr. 3			yes	sr	c			Oct. 30, Nov. 15		
Cooper hawk	sr			tv, sr	fc, rare				res	fc			yes	sr, res	fc, oc				yes	wv	rare					yes
American goshawk				wv	rare				wv	oc			yes	sr, res	c, oc				yes	sr, res	c, oc			Oct. '77		
Red-tailed hawk	sr		yes	res	fc			yes	res	c			yes							av	once					
Red shouldered hawk	sr		yes	res	fc			yes	res	c				sr	unc				yes	sr	unc					
Swainson hawk				res	unc				sr, tv	fc				wv	oc	Apr. 21			yes	wv	oc					yes
Broad-winged hawk				wv	rare				wv	oc																
American rough-legged hawk													formerly	sr	unc				yes	sr	unc					
Golden eagle				tv	unc				res	rare				av												
Bald eagle																	winter '95									
White gyrfalcon														tv	rare					tv						
Gyrfalcon														sr	c	Apr. 15				tv	fc					yes
Black gyrfalcon														sr	unc				yes	sr	c					
Duck hawk														av	once	Apr. 7				tv	fc					yes
Pigeon hawk				tv, sr	unc, rare		Sept. 17		tv	rare				res	fc											yes
American sparrow hawk	sr		yes	tv	c		Nov. 20	yes	tv	unc			yes	tv	unc				May 1, 15	res	fc					
American osprey				sr, res	unc, oc				sr, res	c, oc			yes	av	once					res	fc					
American barn owl				tv	fc	Apr. 9			tv, sr	fc, rare				res	fc					tv	unc					
American long-eared owl	res				rare				av	Sept. '03				tv	unc											
Short-eared owl	res			tv	fc				res	unc																
									wv, res	c, oc																

SPECIES RECORDED	ONTARIO							OR		
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	A f s
Wood ibis										
American bittern	sr.	c.	Apr. 11, 15, 23			Oct. 30, Nov. 10	May 25, June 10	sr.		Apr
Least bittern	sr.	fc.	May 15, 18			Sept. 15, Oct. 10	June 5, 15	sr.		
Great blue heron	tv, sr.	fc.	Mar. 20, 30			Oct. 20, Nov. 15		tv.		
American egret	sv.	once	Aug. '05							
Snowy heron										
Louisiana heron										
Little blue heron										
Green heron	sr.	fc.	May 1, 10			Oct. 5, 15	May 15, 30			
Black-crowned night heron	tv.	unc.			Aug. 31	Oct. 1, 12		sr.	local	
Yellow-crowned night heron										
Whooping crane										
Sandhill crane										
King rail	sr.	rare				Oct. '94				
Clapper rail										
Virginia rail	sr.	fc.	Apr. 20, 30			Oct. 15	May 15, June 10			
Sora	sr.	c.	Apr. 5, 25, 30			Oct. 3, 16	May 18, June 12			
Yellow rail	tv.	rare			Sept. 1	Oct. 4, 6				
Black rail										
Corn crake										
Purple gallinule										
Florida gallinule	sr.	fc.	Apr. 12, 30, May 1			Oct. 20	June 1, 15			
American coot	tv.	fc.	Apr. 20, 30	May	Sept. 20, Oct. 7	Oct. 28, Nov. 5		tv.		
Red phalarope										
Northern phalarope										
Wilson phalarope										
American avocet										
Black-necked stilt										
American woodcock	sr, tv.	unc, fc.	Mar.			Nov.	Apr. 1, 12	sr.	c.	Mar
Wilson snipe	tv, sr.	c, oc.	Mar. 20, 31, Apr. 10	May 10	Aug. 25, Sept. 22	Nov. 5, 20	yes	tv.		
Dowitcher	tv.	rare								
Long-billed dowitcher										
Stilt sandpiper										
Knot	tv.	rare								
Purple sandpiper										
Pectoral sandpiper	tv.	c.	Apr. 6, 14, 25	May 10, 26	July 21, Aug. 30	Oct. 8, 16, Nov. 10				
White-rumped sandpiper	tv.	unc.			Sept. 29, Oct. 17	Nov. 4, Oct. 25				
Baird sandpiper	tv.	unc.			Aug. 25, Sept. 10	Oct. 25, Nov. 20				
Least sandpiper	tv.	c.	Apr. 20, May 6	May 20	July 20, Aug. 20	Sept. 30		tv.	c.	
Dunlin										
Red-backed sandpiper	tv.	fc.	Apr. 20, May 15		Sept. 20	Nov. 10				
Curlew sandpiper										
Semipalmated sandpiper	tv.	c.	Apr. 20, May 6		Sept. 1	Oct. 20, Nov. 5				
Western sandpiper	tv.	oc.								
Sanderling	tv.	fc.	May 15	June 1, 10	Sept. 1, 20	Oct. 15				
Marbled godwit										
Hudsonian godwit	tv.	rare								
Greater yellow-legs	tv.	fc.	Apr. 14, 20	May 10, 12	Aug. 15, Sept. 11	Oct. 25, Nov. 5				
Yellow-legs	tv, sr.	fc, once	Apr. 28, May 4, 10		July 22, Aug. 14	Sept. 28, Oct. 12	yes, 1891	tv.		
Solitary sandpiper	tv.	fc.	Apr. 28, May 1, 8	May 18, 25	July 12, Aug. 15	Sept. 20		tv.		
Willet	tv.	formerly			31 Aug. '82					
Ruff										
Bartramian sandpiper	sr.	fc, local	Apr. 20			Aug. 25, Sept. 10	June 1			
Buff-breasted sandpiper										
Spotted sandpiper	sr.	ab.	Apr. 18, 27, May 3			Aug. 20, Sept. 10	May 10, 25	sr.	c.	
Long-billed curlew	tv.	once			1886					
Hudsonian curlew	tv.	rare	30 May '97							
Eskimo curlew										
European curlew										
Lapwing										
Black-bellied plover	tv.	fc.	May 20, 30	June 1	Aug. 20, 30	Oct. 12				
American golden plover	tv.	fc, fall			Aug. 12, 30	Oct. 15		tv.		
Killdeer	sr.	c.	Mar. 10, 17, 20			Oct. 25, Nov. 10	Apr. 18, May 20	sr.		
Semipalmated plover	tv.	fc.	May 17, 20	June 1	Aug. 20, 30	Sept. 30		tv.		
Piping plover										
Wilson plover										
Turnstone	tv.	irreg.	May 15, 30	June 10	Sept.			tv.		
American oyster catcher										
Bobwhite	res.	rare					yes	res.	c.	
Canada grouse										
Ruffed grouse	res.	fc.					Apr. 15, May 12	res.	fc.	
Canadian ruffed grouse	res.	local					yes			
Willow ptarmigan										
Heath hen										
Wild turkey										
Ring-necked pheasant	res.	c.					yes			
Passenger pigeon			Sept. '02 (last)						1889 (last)	
Mourning dove	sr.	c.	Mar. 20, 30			Oct. 13, Nov. 20	Apr. 20, May 25	sr.	c.	
Ground dove										
Turkey vulture	sv.	rare	July 3, Aug. 13, 18			Sept., Dec. 28		sv.	rare	Apr
Black vulture										
Swallow-tailed kite										
Marsh hawk	sr.	fc.	Mar. 20, Apr. 6			Nov. 1, 22	May 20	sr.		
Sharp-shinned hawk	tv, res.	c, rare	Mar. 20, Apr. 4	May 1, 13	Aug. 20, Sept. 11	Sept. 20, Oct. 25	May 25	sr.		
Cooper hawk	tv, res.	fc, rare	Mar. 15, Apr. 10		Aug. 16, Sept. 9	Oct. 14	yes	sr.	c.	Apr
American goshawk	wv.	unc.		Mar. 15, 25	Oct. 20					
Red-tailed hawk	res.	fc.				Nov. 11	Mar. 20, Apr. 20	sr.		Mar
Red-shouldered hawk	sr, res.	fc, oc.	Mar. 1, 15			Oct. 14, Nov. 1	Apr. 15, May 10	sr.		Mar
Swainson hawk								av, once	14 Oct. '92	
Broad-winged hawk	tv.	fc.	Apr. 15, 20, 23	May 8, 25	Aug. 10, 20	Oct. 15		sr, tv.	fc.	
American rough-legged hawk	wv.	irreg.		Apr. 6	Oct.					
Golden eagle									rare	
Bald eagle	res.	unc.						res.	rare	
White gyrfalcon										
Gyrfalcon	wv.	once			25 Dec. '05					
Black gyrfalcon										
Duck hawk	tv.	rare	15 Mar. '03					res.	rare	
Pigeon hawk	tv, sr.	unc, rare	Apr. 11, 25	May 3, 11, 25	Sept.	Oct.	1891	tv.		
American sparrow hawk	sr, res.	fc, unc	Mar. 15, 31			Oct. 20, Nov. 20	May 10, 25	sr.		
American osprey	tv.	fc.	Mar. 26, Apr. 15, 25	May 10	Aug. 20, Sept. 9	Oct. 7, 25		tv, sr.	fc, oc.	Apr
American barn owl	av.	once	18 June '00					av.	once	
American long-eared owl	res.	unc.					yes	res.	fc.	
Short-eared owl	wv, res.	fc, unc		Apr. 25	Oct. 8		15 Apr. '02	wv, tv.		

arts or uth	Breeds	ORLEANS							OSWEGO				
		Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Departs for south	Breeds
	yes	sr	fc					June 1	sr	c	Apr		yes
		sr	unc					yes	sr	unc	May		yes
		sr	c	Apr. 1				yes	sr	c			yes
		sv	rare	Apr. 25, July 27			Nov. 28						
	yes	sr	fc	Apr. 30				yes	sr	c			May 15
		tv	rare	Apr. 10					tv	rare			
		tv	twice	20 May '86									
		sr	rare				Aug. '80						
		sr	c	Apr. 30			Oct. 1	yes	sr	c			yes
		sr	fc	Apr. 19, 30				yes	sr	fc	May 17	Oct. 17	yes
		tv	rare	Apr. 21, 25									
		sr	fc	Apr			Oct	June 10	sr	fc			June 10
		tv							tv, sr	c, fc			yes
	yes	sr	c					yes	sr	c			yes
		tv, sr	c, oc	Apr. 10				yes	tv, sr	ab, rare	Apr. 4, 12, 22	Oct. 11	yes
		tv	rare	Apr. 25, May 1									
		tv	rare			Sept. 4	Sept. 9						
		tv	rare										
		tv	fc						tv	fc			
		tv	unc			Sept. 10, 20	Oct. 16						
		tv	unc			Aug. 20, Sept. 3, 8	Sept. 16, Oct. 18						
		tv	fc	Apr. 20, May 10		Aug	Sept		tv	fc			
		tv	oc						tv	fc			
		tv	c						tv				
		tv	rare										
		tv	fc						tv	unc			
		tv	rare				Oct. '88						
		tv	rare				Sept. '90						
		tv	fc						tv	fc			
		tv	c	Apr. 20	May 1		Oct. 15		tv	fc	May 5		
		tv		Apr. 25					tv	fc			
		sr	local					yes	sr	unc			yes
		tv	rare			Aug	Sept						
	yes	sr	c	May 4				May 20, June 10	sr	ab	Apr. 27, 29		yes
									tv	rare			
		tv	rare			Sept. '97			tv	oc			
									tv	fc			
		tv	fc, fall						tv	fc		Sept. 14	
20.	yes	sr	c	Mar. 15, 22			Oct	yes	sr	ab	Mar. 20, 30	Oct. 25	yes
		tv	unc	May 15	May 30	Aug. 1	Oct. 1		tv	unc			
									tv	rare			
19.		tv	unc		May	Aug	Sept						
	yes	res	rare					yes	res	rare			yes
	yes	res	c					yes	res	ab			yes
									res	c			
		res	c					yes					
				1898 (last)							1898 (last)		
	yes	sr	c	Mar. 15, 26				yes	sr	local			yes
	?	sv	rare	May 23, July 18									
		av	once	28 May '92									
	yes	sr	c					yes	sr	c			May 2
		sr	fc					yes	sr	fc			
	yes	sr	fc	Mar. 20				yes	sr	fc			May 8
		wv	rare			Oct			tv	c			Apr. 22, May 7
	yes	sr	c	Mar. 12				Apr. 22	sr	c			Apr. 22
	yes	sr	c	Mar. 10				Apr. 18	sr	c			Apr. 18
	yes	sr, tv	oc, fc						sr	oc			yes
	?	wv	fc						wv	fc			
		av					1 Nov. '82						
		res	unc					formerly	res	fc			Mar. 15, May 1
	yes	tv	rare										
		tv	unc	Apr		Sept	Oct		tv, sr	fc, rare	Apr. 20		yes
	yes	sr	c	Apr. 1			Sept	yes	sr	c			yes
	yes	tv	fc	Apr		Sept	Oct		tv, sr	c, oc			yes
		av	twice	20 June '05			30 Oct. '05						
	yes	res	unc					Apr. 16	res	unc			yes
		res	fc					yes	res	fc			yes

SPECIES RECORDED	ONTARIO							ORANGE					ORLEANS							OSWEGO				
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Departs for south	Breeds
Wood ibis																								
American bittern	sr	c	Apr. 11, 15, 23			Oct. 30, Nov. 10	May 25, June 10	sr		Apr.		yes	sr	fc					June 1	sr		Apr.		yes
Least bittern	sr	fc	May 15, 18			Sept. 15, Oct. 10	June 5, 15	sr					sr	unc					yes	sr	unc	May		yes
Great blue heron	tv, sr	fc	Mar. 20, 30			Oct. 20, Nov. 15		tv					sr	c	Apr. 1				yes	sr	c			yes
American egret	sv	once	Aug. '05										sv	rare	Apr. 25, July 27			Nov. 28						
Snowy heron																								
Louisiana heron																								
Little blue heron																								
Green heron	sr	fc	May 1, 10			Oct. 5, 15	May 15, 30						sr	fc	Apr. 30				yes	sr				May 15
Black-crowned night heron	tv	unc			Aug. 31	Oct. 1, 12		sr	local			yes	tv	rare	Apr. 10					tv	rare			
Yellow-crowned night heron																								
Whooping crane																								
Sandhill crane													tv	twice	20 May '86									
King rail	sr	rare				Oct. '94							sr	rare				Aug. '80						
Clapper rail																								
Virginia rail	sr	fc	Apr. 20, 30			Oct. 15	May 15, June 10						sr	c	Apr. 30			Oct. 1	yes	sr	c			yes
Sora	sr	c	Apr. 5, 25, 30			Oct. 3, 16	May 18, June 12						sr	fc	Apr. 19, 30				yes	sr	fc	May 17	Oct. 17	yes
Yellow rail	tv	rare			Sept. 1	Oct. 4, 6							tv	rare	Apr. 21, 25									
Black rail																								
Corn crake																								
Purple gallinule																								
Florida gallinule	sr	fc	Apr. 12, 30, May 1			Oct. 20	June 1, 15						sr	fc	Apr. 20			Oct.	June 10	sr	fc			June 10
American coot	tv	fc	Apr. 20, 30	May	Sept. 20, Oct. 7	Oct. 28, Nov. 5		tv					tv							tv, sr	c, fc			yes
Red phalarope																								
Northern phalarope																								
Wilson phalarope																								
American avocet																								
Black-necked stilt																								
American woodcock	r, tv	unc, fc	Mar.			Nov.	Apr. 1, 12	sr	c	Mar. 3	Nov.	yes	sr	c					yes	sr	c			yes
Wilson snipe	tv, r	c, oc	Mar. 20, 31, Apr. 10	May 10	Aug. 25, Sept. 22	Nov. 5, 20	yes	tv					tv, sr	c, oc	Apr. 10				yes	tv, sr	ab, rare	Apr. 4, 12, 22	Oct. 11	yes
Dowitcher	tv	rare											tv	rare	Apr. 25, May 1									
Long-billed dowitcher																								
Stilt sandpiper																								
Knot	tv	rare											tv	rare			Sept. 4	Sept. 9						
Purple sandpiper													tv	rare						tv	fc			
Pectoral sandpiper	tv	c	Apr. 6, 14, 25	May 10, 26	July 21, Aug. 30	Oct. 8, 16, Nov. 10							tv	fc										
White-rump sandpiper	tv	unc			Sept. 20, Oct. 27	Nov. 4, Oct. 25							tv	unc			Sept. 10, 20	Oct. 16						
Baird sandpiper	tv	unc			Aug. 25, Sept. 10	Oct. 25, Nov. 20							tv	unc			Aug. 20, Sept. 3, 8	Sept. 16, Oct. 18		tv	fc			
Least sandpiper	tv	c	Apr. 20, May 6	May 20	July 20, Aug. 20	Sept. 30		tv	c				tv	fc	Apr. 20, May 10		Aug.	Sept.						
Dunlin																				tv	fc			
Red-backed sandpiper	tv	fc	Apr. 20, May 15		Sept. 20	Nov. 10							tv	oc										
Curlew sandpiper																				tv				
Semipalmated sandpiper	tv	c	Apr. 20, May 6		Sept. 1	Oct. 20, Nov. 5							tv	c										
Western sandpiper	tv	unc											tv	rare						tv	unc			
Sanderling	tv	fc	May 15	June 1, 10	Sept. 1, 20	Oct. 15							tv	fc										
Marbled godwit													tv	rare				Oct. '88						
Hudsonian godwit	tv	rare											tv	rare				Sept. '90						
Greater yellow-legs	tv	fc	Apr. 14, 2	May 10, 12	Aug. 15, Sept. 11	Oct. 25, Nov. 5							tv	fc						tv	fc	May 5		
Yellow-legs	tv, r	fc, once	Apr. 28, May 4, 10		July 22, Aug. 14	Sept. 28, Oct. 12	yes, 1891	tv					tv	c	Apr. 20	May 1		Oct. 15		tv	fc			
Solitary sandpiper	tv	fc	Apr. 28, May 1, 8	May 18, 25	July 12, Aug. 15	Sept. 20		tv					tv		Apr. 25									
Willet	tv	formerly			18 Aug. '82																			
Ruff																			yes	sr	unc			yes
Bartramian sandpiper	r	fc, local	Apr. 20			Aug. 25, Sept. 10	June 1						sr	local										
Buff-breasted sandpiper													tv	rare			Aug.	Sept.	May 20, June 10	sr	ab	Apr. 27, 29		yes
Spotted sandpiper	sr	ab	Apr. 18, 27, May 3			Aug. 20, Sept. 10	May 10, 25	sr	c			yes	sr	c	May 4					tv	rare			
Long-billed curlew	tv	unc			1886															tv	oc			
Hudsonian curlew	tv	rare			10 May '97								tv	rare			Sept. '97							
Eskimo curlew																								
European curlew																								
Lapwing																				tv	fc			
Black-bellied plover	tv	fc	May 20, 30	June 1	Aug. 27, 30	Oct. 12														tv	fc		Sept. 14	
American golden plover	tv	fc, fall			Aug. 12, 30	Oct. 15		tv					tv	fc, fall						r	ab	Mar. 20, 30	Oct. 25	yes
Killdeer	sr		Mar. 10, 17, 20			Oct. 25, Nov. 10	Apr. 18, May 20	sr				Sept. 20	sr	c	Mar. 15, 22			Oct.	yes	tv	unc			
Semipalmated plover	tv	fc	May 17, 20	June 1	Aug. 20, 30	Sept. 30		tv					tv	unc	May 15	May 30	Aug. 1	Oct. 1		tv	rare			
Piping plover																								
Wilson plover																								
Upland plover	tv	irreg	May 15, 10	June 10	Sept.			tv				Sept. 19	tv	unc		May	Aug.	Sept.			rare			yes
American oyster-catcher																								
Bobwhite	res	rare					yes	res	c			yes	res	rare					yes	res	ab			yes
Canada grouse																				res				
Ruffed grouse	res	fc					Apr. 15, May 12	res	fc			yes	res	c					yes	res	c			
Canadian ruffed grouse	res	local					yes																	
Willow ptarmigan																								
Heath hen																								
Wild turkey																			yes			1898 (last)		
Ring-necked pheasant	res						yes						res	c							local			yes
Passenger pigeon			Sept. '92 (last)						1889 (last)										yes	r				
Mourning dove	sr	fc	Mar. 20, 30			Oct. 13, Nov. 20	Apr. 20, May 28	sr	c			yes	sr	c	1898 (last)									
Ground dove															Mar. 15, 20									
Turkey vulture	sv	rare	July 3, Aug. 13, 18			Sept., Dec. 28		sv	rare	Apr. 30			sv	rare	May 23, July 18									May 2
Black vulture													av	once	28 May '92									
Swallow-tailed kite																			yes	sr	fc			May 8
Marsh hawk	r	fc	Mar. 20, Apr. 6			Nov. 1, 22	May 30	sr				yes	sr	c					yes	sr	fc			Apr. 22, May 7
Sharp-shinned hawk	tv, res	c, rare	Mar. 20, Apr. 4	May 1, 13	Aug. 20, Sept. 11	Sept. 26, Oct. 25	May 25	sr				yes	sr	fc					yes	tv	c			Apr. 22
Cooper's hawk	tv, res	fc, rare	Mar. 15, Apr. 10		Aug. 16, Sept. 9	Oct. 14	yes	sr		Apr. 15		yes	sr	fc	Mar. 20		Oct.		Apr. 22	tv	c			Apr. 18
American goshawk	wv	unc		Mar. 15, 25	Oct. 20			wv	rare				wv	rare					Apr. 18	sr	c			
Red-tailed hawk	res	fc				Nov. 11	Mar. 20, Apr. 20	sr		Mar. 3		yes	sr	c	Mar. 12									yes
Red-shouldered hawk	sr, res	fc, rare	Mar. 1, 15			Oct. 14, Nov. 1	Apr. 15, May 10	sr		Mar. 2		yes	sr	c	Mar. 10					r				
Swainson's hawk								av, once		14 Oct. '92										av	c			
Broad-winged hawk	tv	fc	Apr. 15, 20, 23	May 8, 25	Aug. 15, 20	Oct. 15		sr, tv	fc				sr, tv	oc, fc										Mar. 15, May 1
American rough-legged hawk	wv	irreg		Apr. 6	Oct.								wv	fc				1 Nov. '82	formerly	res	fc			
Golden eagle									rare				av											
Bald eagle	res	unc						res	rare				res	unc										
White-gyrfalcon																								
Gyrfalcon	wv	once																						
Black gyrfalcon					25 Dec. '05															tv, sr	fc, rare	Apr. 20		yes
Duck hawk	tv	rare	15 Mar. '94																	sr	c			yes
Pigeon hawk	tv, sr	unc, rare	Apr. 11, 25	May 1, 11, 25	Sept.	Oct.	1891	res	rare			yes	tv	rare			Sept.	Oct.	yes	tv, sr	c, oc			
American sparrow hawk	sr, res	fc, unc	Mar. 15, 31					tv					tv	unc	Apr.			Sept.						yes
American osprey	tv	fc	Mar. 20, Apr. 15, 25	May 10	Aug. 20, Sept. 9	Oct. 20, Nov. 20	May 10, 25	sr		Apr. 19		yes	sr	c	Apr. 1		Sept.	Oct.			unc			
American barn owl	av	once	18 June '00			Oct. 7, 25		tv, sr	fc, oc			yes	tv	fc	Apr.			30 Oct. '05	Apr. 16	res	fc			yes
American long-eared owl	res	unc					yes	av	once				av	twice	20 June '05				yes	res				
Short-eared owl	wv, res	fc, unc		Apr. 25	Oct. 8		15 Apr. '02	res	fc				res	unc										
								wv, tv					res	fc										

SPECIES RECORDED	OTSEGO				PUTNAM				
	Resident or transient	Common or rare	Arrives from south	Breeds	Resident or transient	Common or rare	Arrives from south	Returns from north	Bree
Wood ibis									
American bittern	sr.				tv, sr.	c, oc	Apr. 4		
Least bittern	sr.				sr.	rare			
Great blue heron	sr.				tv.	c			
American egret									
Snowy heron									
Louisiana heron									
Little blue heron									
Green heron	sr.			yes.	sr.	c	May 13		yes.
Black-crowned night heron					tv.	c	Apr. 23		
Yellow-crowned night heron									
Whooping crane									
Sandhill crane									
King rail									
Clapper rail									
Virginia rail	sr.				tv, sr.	c, oc			yes.
Sora	sr.				tv.	c			
Yellow rail					tv.	rare		Aug.	
Black rail									
Corn crake									
Purple gallinule									
Florida gallinule					tv.	unc.			
American coot	tv.				tv.	c, fall			
Red phalarope									
Northern phalarope									
Wilson phalarope					av.				
American avocet									
Black-necked stilt									
American woodcock	sr.			yes.	sr.	fc	Mar. 20, 30		yes.
Wilson snipe	tv.	fc	Apr. 12		tv.	c	Apr. 16		
Dowitcher									
Long-billed dowitcher									
Stilt sandpiper									
Knot									
Purple sandpiper									
Pectoral sandpiper					tv.	c			
White-rumped sandpiper					tv.	rare		Oct.	
Baird sandpiper									
Least sandpiper					tv.	c, fall	May 20	July 20	
Dunlin									
Red-backed sandpiper									
Curlew sandpiper									
Semipalmated sandpiper					tv.	fc		Sept. 9	
Western sandpiper									
Sanderling					tv.	unc.			
Marbled godwit									
Hudsonian godwit									
Greater yellow-legs	tv.				tv.	unc.			
Yellow-legs	tv.				tv.	fc			
Solitary sandpiper					tv.	c	May 7		
Willet									
Ruff									
Bartramian sandpiper									
Buff-breasted sandpiper									
Spotted sandpiper	sr.	c	Apr. 24		sr.	c	Apr. 24, 26		yes.
Long-billed curlew									
Hudsonian curlew									
Eskimo curlew									
European curlew									
Lapwing									
Black-bellied plover	tv.								
American golden plover	tv.								
Killdeer	sr.		Apr. 6		tv.	unc.	Mar. 23	Oct.	
Semipalmated plover					tv.				
Piping plover									
Wilson plover									
Turnstone									
American oyster catcher									
Bobwhite					res.	c			yes.
Canada grouse									
Ruffed grouse	res.			yes.	res.	c			yes.
Canadian ruffed grouse									
Willow ptarmigan									
Heath hen									
Wild turkey									
Ring-necked pheasant									
Passenger pigeon									
Mourning dove					sr.	c	Apr. 1		yes.
Ground dove									
Turkey vulture									
Black vulture									
Swallow-tailed kite									
Marsh hawk	sr.				sr.	c	Apr. 2		yes.
Sharp-shinned hawk	sr.				sr.	unc.	Apr. 3		yes.
Cooper hawk					tv.	unc.	Apr. 10		
American goshawk	wv.	rare							
Red-tailed hawk	sr.				res.	c			yes.
Red-shouldered hawk	sr.				sr.	c	Mar. 1		yes.
Swainson hawk									
Broad-winged hawk					sr.	c	Apr. 3		yes.
American rough-legged hawk									
Golden eagle						rare	Mar. '76		
Bald eagle	tv.	unc.			tv.	fc.	Apr. 6, May 2		
White gyrfalcon									
Gyrfalcon									
Black gyrfalcon									
Duck hawk									
Pigeon hawk	tv.				tv.	fc	Apr. 3		
American sparrow hawk	sr.				sr.	c	Mar. 20		yes.
American osprey	sr, tv.				tv.	c	Apr. 2, 10		
American barn owl									
American long-eared owl	res.				wv.	c			
Short-eared owl	res.				tv, res.	c, rare			

	RENSSELAER						RICHMOND				ROCKLAND			
ent	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Breeds	Resident or transient	Common or rare	Arrives from south	Breeds
	once	24 June '76												
	c						sr, tv	oc	Apr. 13	yes	sr	unc		
	oc										sr	rare		
	c					yes	tv	c			tv, sr	fc, oc		
							sv	oc	Aug. 5					
							sv	oc						
	c	May 10			Oct. 10	yes	sr	fc		yes	sr	c		yes
	c				Sept. 25	yes	tv	fc		formerly	tv	fc		
							sr	unc		yes	tv	rare		
	c					yes	tv, sr	fc, unc		yes	sr			yes
	c					yes	tv, sr	c, rare		yes	tv, sr	fc, unc		yes
	once	1873												
	rare				Oct. 19	yes								
	fc, oc						tv	fc			tv			
	rare			18 Sept. '89										
					4 Sept. '81									
	c, unc	Mar. 17, Apr. 1, 22			Nov. 15	yes	sr	fc	Apr. 2	yes	tv, sr	c, fc		yes
	c, oc	Apr. 21	May 5		Oct. 18		tv	fc			tv			
	rare						tv							
	rare	May 1		Sept. 1			tv	rare						
	rare													
	fc	May 7, 9, 15					tv	fc			tv			
	fc						tv	c	May 16		tv			
	fc						tv				tv			
	fc						tv	c			tv			
	rare						tv	unc			tv			
	c	Apr. 20		Sept			tv	fc			tv			
	c	Apr	May	Sept			tv	rare			tv			
	c	Apr. 28, May 5	May 20				tv	fc			tv			
							tv	rare						
	rare	Apr. 29			Aug. 13, 25	yes								
	rare			27 Aug. '61										
	c	Apr. 20, 24			Sept. 2, Oct. 10	yes	sr		Apr. 21, May 2	yes	sr	c		yes
	rare													
	oc						tv	fc						
	oc						tv	rare						
	unc						tv	rare						
		May		Sept			tv	c	Apr. 28					
	rare													
	rare					yes	res	unc			res	fc		yes
	c					yes		ext			res	fc		yes
								ext						
		Mar. '82						ext. 1847						
	fc	Apr. 14				yes	sr	rare			sr	unc		
							sv	oc						
	rare	9 June '00	16 July '86			(?) yes					av	once	22 Aug. '00	
	c, oc					yes	tv, sr	c, rare		yes	sr	fc		
	c					yes	tv, sr	c, unc		yes		unc		yes
	fc, c					yes	tv, sr	fc			sr, res	fc, oc		yes
	unc		Mar	Oct. 25			wv	rare						
	c					yes	tv	oc			res	fc		yes
	c					yes	sr	c		yes	res	c		yes
	fc, oc					yes	tv	fc			tv	fc		
	oc													
	oc													
	fc						tv, wv	oc				unc		
	?													
	oc						tv	rare			sr	unc		yes
	fc			Oct. 1			tv				tv	unc		
	c					yes	tv, sr	c, rare		yes	sr	fc		
	c, oc						tv	c			tv	unc		
	rare				Nov. 19, Dec. 3		res	rare		yes				
	c, rare					yes	tv, res	fc, oc			res	rare		
	c, rare				Dec. 15	yes	wv	fc			wv			

SPECIES RECORDED	OTSEGO				PUTNAM					RENSSELAER							RICHMOND				ROCKLAND			
	Resident or transient	Common or rare	Arrives from south	Breeds	Resident or transient	Common or rare	Arrives from south	Returns from north	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Breeds	Resident or transient	Common or rare	Arrives from south	Breeds
Wood ibis										av	once	24 June '76												
American bittern	sr				tv, sr	c, oc	Apr. 4			sr	c						sr, tv	oc	Apr. 13	yes	sr	unc		
Least bittern	sr				sr	rare				sr	oc										sr	rare		
Great blue heron	sr				tv	c				sr	c					yes	tv	c			tv, sr	fc, oc		
American egret																	sv	oc	Aug. 5					
Snowy heron																								
Louisiana heron																								
Little blue heron																	sv	oc						
Green heron	sr			yes	sr	c	May 13		yes	sr	c	May 10			Oct. 10	yes	sr	fc		yes	sr	c		yes
Black-crowned night heron					tv	c	Apr. 23			sr	c				Sept. 25	yes	tv	fc		formerly	tv	fc		
Yellow-crowned night heron																								
Whooping crane																								
Sandhill crane																								
King rail																								
Clapper rail																	sr	unc		yes	tv	rare		
Virginia rail	sr				tv, sr	c, oc			yes	sr	c					yes	tv, sr	fc, unc		yes	sr			yes
Sora	sr				tv	c				sr	c					yes	tv, sr	c, rare		yes	tv, sr	fc, unc		yes
Yellow rail					tv	rare		Aug																
Black rail										av	once	1873												
Corn crake																								
Purple gallinule																								
Florida gallinule					tv	unc				sr	rare				Oct. 19	yes								
American coot	tv				tv	c, fall				tv, sr	fc, oc						tv	fc			tv			
Red phalarope										tv	rare			18 Sept. '89										
Northern phalarope										av					4 Sept. '81									
Wilson phalarope					av																			
American avocet																								
Black-necked stilt																								
American woodcock	sr			yes	sr	fc	Mar. 20, 30		yes	tv, sr	c, unc	Mar. 17, Apr. 1, 22			Nov. 15	yes	sr	fc	Apr. 2	yes	tv, sr	c, fc		yes
Wilson snipe	tv	fc	Apr. 12		tv	c	Apr. 16			tv, sr	c, oc	Apr. 21	May 5		Oct. 18		tv	fc			tv			
Dowitcher										tv	rare						tv							
Long-billed dowitcher																								
Stilt sandpiper																								
Knot										tv	rare	May 1		Sept. 1			tv	rare						
Purple sandpiper										tv	rare													
Pectoral sandpiper					tv	c				tv	fc	May 7, 9, 15					tv	fc			tv			
White-rumped sandpiper					tv	rare		Oct																
Baird sandpiper																								
Least sandpiper					tv	c, fall	May 20	July 20		tv	fc						tv	c	May 16		tv			
Dunlin																								
Red-backed sandpiper										tv	fc						tv				tv			
Curlew sandpiper																								
Semipalmated sandpiper					tv	fc		Sept. 9		tv	fc						tv	c			tv			
Western sandpiper																								
Sanderling					tv	unc				tv	rare						tv	unc			tv			
Marbled godwit																								
Hudsonian godwit																								
Greater yellow-legs	tv				tv	unc				tv	c	Apr. 20		Sept			tv	fc			tv			
Yellow legs	tv				tv	fc				tv	c	Apr	May	Sept			tv	rare			tv			
Solitary sandpiper					tv	c	May 7			tv	c	Apr. 28, May 5	May 20				tv	fc			tv			
Willet																	tv	rare						
Ruff																								
Bartramian sandpiper										tv, sr	rare	Apr. 29			Aug. 13, 25	yes								
Buff-breasted sandpiper										tv	rare													
Spotted sandpiper	sr	c	Apr. 24		sr	c	Apr. 24, 26		yes	sr	c	Apr. 20, 24		27 Aug. '61	Sept. 2, Oct. 10	yes	sr		Apr. 21, May 2	yes	sr	c		yes
Long-billed curlew																								
Hudsonian curlew																								
Eskimo curlew										tv	rare													
European curlew																								
Lapwing																								
Black-bellied plover	tv									tv	oc						tv	fc						
American golden plover	tv									tv	oc						tv	rare						
Killdeer	sr		Apr. 6		tv	unc	Mar. 23	Oct		sr	unc						tv	rare						
Semipalmated plover					tv					tv		May		Sept			tv	c	Apr. 28					
Piping plover																								
Wilson plover																								
Turnstone										tv	rare													
American oyster catcher																								
Bobwhite										res	rare										res	fc		yes
Canada grouse					res	c			yes							yes	res	unc						
Ruffed grouse	res			yes	res	c			yes	res	c					yes		ext			res	fc		yes
Canadian ruffed grouse																								
Willow ptarmigan																								
Heath hen																								
Wild turkey																		ext						
Ring-necked pheasant																								
Passenger pigeon																		ext. 1847						
Mourning dove										sr	fc	Mar. '82									sr	unc		
Ground dove					sr	c	Apr. 1		yes			Apr. 14				yes	sr	rare						
Turkey vulture																								
Black vulture																	sv	oc						
Swallow-tailed kite										sr											av	once	22 Aug. '00	
Marsh hawk	sr									tv, sr	rare	9 June '00	16 July '86			(?) yes				yes	sr	fc		
Sharp-shinned hawk	sr				sr	c	Apr. 2		yes	sr	c, oc					yes	tv, sr	c, rare		yes		unc		yes
Cooper hawk					sr	unc	Apr. 3		yes	tv, sr	c					yes	tv, sr	c, unc			sr, res	fc, oc		yes
American goshawk	wv	rare			tv	unc	Apr. 10			wv	fc, c					yes	tv, sr	fc						
Red-tailed hawk	sr									sr	unc						wv	rare			res	fc		yes
Red-shouldered hawk	sr				res	c			yes	sr	c		Mar	Oct. 25		yes	tv	oc		yes	res	c		yes
Swainson hawk					sr	c	Mar. 1		yes		c					yes	sr	c						
Broad-winged hawk																					tv	fc		
American rough-legged hawk					sr	c	Apr. 3		yes	tv, sr	fc, oc					yes	tv	fc						
Golden eagle										wv	oc													
Bald eagle	tv	unc				rare	Mar. '76			tv	oc											unc		
White gyrfalcon					tv	fc	Apr. 6, May 2			tv	fc						tv, wv	oc						
Gyrfalcon										av	?													
Black gyrfalcon																								
Duck hawk										tv											sr	unc		yes
Pigeon hawk	tv									tv	oc						tv	rare			tv	unc		
American sparrow hawk	sr				tv	fc	Apr. 3			sr	fc						tv			yes	sr	fc		
American osprey	sr, tv				sr	c	Mar. 20		yes	tv, sr	c			Oct. 1		yes	tv, sr	c, rare			tv	unc		
American barn owl					tv	c	Apr. 2, 10			res	c, oc						tv	c		yes				
American long-eared owl	res									wv, res	rare						res	rare			res	rare		
Short-eared owl	res				wv	c				tv, res	c, rare				Nov. 19, Dec. 3	yes	tv, res	fc, oc			wv			
					tv, res	c, rare					c, rare				Dec 15	yes	wv	fc						

SPECIES RECORDED	ST LAWRENCE			SARATOGA						
	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breed
Wood ibis				av.	once	summer, 1896				
American bittern	sr.		yes	sr, tv.	unc, fc	Apr. 15			Oct. 10	May
Least bittern										
Great blue heron	tv, sr.	fc, oc		tv.	fc					
American egret										
Snowy heron				av.		summer, 1893				
Louisiana heron										
Little blue heron										
Green heron	sr.			sr.	fc	May 7			Sept. 15, 25	yes
Black-crowned night heron				tv.	fc				Aug. 15, Sept. 20	
Yellow-crowned night heron				sr.	local					14 May '81
Whooping crane										
Sandhill crane										
King rail										
Clapper rail										
Virginia rail	sr.			tv.	fc, fall				Oct.	
Sora	sr.			tv.					Oct.	
Yellow rail				tv.	rare					
Black rail										
Corn crake										
Purple gallinule										
Florida gallinule	sr.									
American coot	tv.			tv.	fc				Oct.	
Red phalarope										
Northern phalarope										
Wilson phalarope										
American avocet										
Black-necked stilt										
American woodcock	sr.		yes	tv, sr.	fc, unc	Apr. 1, 8			Oct. 20, Nov. 1	yes
Wilson snipe	tv.			tv.	fc	Apr.	May 10		Oct. 15, 20	
Dowitcher				tv.	rare	25 May '99				
Long-billed dowitcher										
Stilt sandpiper				tv.	rare					
Knot										
Purple sandpiper										
Pectoral sandpiper	tv.			tv.						
White-rumped sandpiper	tv.									
Baird sandpiper										
Least sandpiper	tv.			tv.						
Dunlin										
Red-backed sandpiper	tv.			tv.				Oct. 8		
Curlew sandpiper										
Semipalmated sandpiper	tv.			tv.						
Western sandpiper	tv.									
Sanderling	tv.									
Marbled godwit										
Hudsonian godwit										
Greater yellow-legs	tv.			tv.		Apr. 15		Aug. 31, Sept.	Oct.	
Yellow-legs	tv.			tv.						
Solitary sandpiper	tv.			tv.						
Willet										
Ruff										
Bartramian sandpiper	tv, sr.	rare	yes	tv, sr.	fc	Apr. 15, 24				yes
Buff-breasted sandpiper										
Spotted sandpiper	sr.	c	yes	sr.	c	Apr. 30, May 7			Aug. 15	yes, May 3
Long-billed curlew										
Hudsonian curlew	tv.									
Eskimo curlew										
European curlew										
Lapwing										
Black-bellied plover	tv.			tv.		May 30				
American golden plover	tv.			tv.	unc					
Killdeer	sr.			tv, sr.	fc	Mar. 27				yes
Semipalmated plover	tv.			tv.		May 30				
Piping plover										
Wilson plover										
Turnstone										
American oyster catcher										
Bobwhite				res.	rare					yes
Canada grouse										
Ruffed grouse	res.		yes	res.	c					Apr. 20, Ju
Canadian ruffed grouse	res.		yes							
Willow ptarmigan										
Heath hen										
Wild turkey										
Ring-necked pheasant										
Passenger pigeon					rare					
Mourning dove	sr.			sr.	fc	Mar. 26, 31			Oct. 1	May 9
Ground dove										
Turkey vulture										
Black vulture										
Swallow-tailed kite										
Marsh hawk	sr.			sr.	fc	Apr. 1			Nov. 1	May 1
Sharp-shinned hawk	tv, sr.	c, oc		sr, res.	fc, oc					May 15
Cooper hawk	sr.	unc		sr.	fc	Apr. 1				May 10, 27
American goshawk				wv.	oc					
Red-tailed hawk	sr.	fc		res.	c					Apr. 1, 30
Red-shouldered hawk	sr.	fc		res.	c					Mar. 15, A
Swainson hawk										
Broad-winged hawk	sr.	oc		sr.	fc	Apr. 1				Apr. 18, M
American rough-legged hawk										
Golden eagle										
Bald eagle	res.	unc		tv.	rare	Apr. 10				
White gyrfalcon										
Gyrfalcon										
Black gyrfalcon										
Duck hawk				tv.	rare	10 Apr. '92				
Pigeon hawk	tv.			tv.						
American sparrow hawk	sr.	fc		sr.	c	Apr.				May 12, 27
American osprey	sr.	unc		tv.	fc	Apr. 15			Oct. 1	
American barn owl										
American long-eared owl	res.			res.	unc					May 5
Short-eared owl	tv.			tv, sr.	oc					yes

SCHENECTADY				SCHOHARIE			SCHUYLER				SENECA		
dent or sient	Common or rare	Arrives from south	Breeds	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Arrives from south	Breeds	Resident or transient	Common or rare	Breeds
	rare			sr	unc		sr	c		yes	sr	c	yes
							sr	fc		yes	sr	fc	yes
	fc			tv	oc		tv, sr	fc, c		yes	sr, tv	fc, c	
		Apr. 28	yes	sr	fc	yes	sr	c		yes	sr	c	yes
											tv	oc	
							sr	oc			sr	fc	yes
				sr	rare		sr	c		yes	sr	c	yes
				sr	rare		sr	c		yes	sr	c	yes
							tv	rare			tv	oc	
							av	once, Apr. '82					
							sr			yes	sr	c	yes
							tv	c			tv, sr	c, oc	yes
											tv	oc	
				sr		yes	sr			yes	sr	unc	yes
				tv	unc		tv, sr	c		?	tv	c	
											tv	rare	
											tv	rare	
				tv	unc		tv	fc			tv	c	
											tv	unc	
											tv	oc	
				tv	unc		tv	fc			tv	fc	
							tv	oc			tv	fc	
							tv	fc			tv	c	
							tv	fc					
											tv	oc	
				tv	unc		tv	fc			tv	c	
				tv	unc		tv	c			tv	c	
				tv			tv	fc	May 4		tv	fc	
											sr	local	
	c		yes	sr	ab, May 4	yes	sr	ab	Apr. 9, 28, May 1	yes	sr	ab	yes
											tv	rare	
							tv				tv		
				tv	unc		tv				tv	29 Oct. '07	
				tv	fc		sr				sr		yes
							tv				tv		
	rare			res	rare		res	rare		yes	res	rare	
	fc		yes	res	c	yes	res	c		yes	res	c	yes
					1897 (last)								
				sr			sr	fc		yes	sr	c	yes
											sv	rare, 1 July '00	
				sr			sr	c		yes	sr, res	c, oc	yes
				sr			tv, sr	c, oc			sr, tv	oc, c	
				sr			sr	oc		yes	sr		
											wv	rare	
				sr			res	c		yes	sr, res	c, oc	yes
				sr			res	c		yes	sr, res	c, oc	yes
											tv	oc	
											wv	fc	
							tv	unc			tv	unc	
											tv	unc	
							tv	oc			tv	unc	
				sr		yes	sr	fc		yes	sr	c	yes
				tv	oc		tv	fc			tv	unc	
											av	once	
				res			res				res		
							res	unc			res	fc	yes

SPECIES RECORDED	ST LAWRENCE			SARATOGA							SCHENECTADY				SCHOHARIE			SCHUYLER				SENECA		
	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Breeds	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Arrives from south	Breeds	Resident or transient	Common or rare	Breeds
Wood ibis				av	once	summer, 1896																		
American bittern	sr		yes	sr, tv	unc, fc	Apr. 15			Oct. 10	May	sr	rare			sr	unc		sr	c					
Least bittern																		sr	fc		yes	sr	c	yes
Great blue heron	tv, sr	fc, oc		tv	fc						tv	fc			tv	oc		tv, sr	fc, c		yes	sr	fc	yes
American egret																					yes	sr, tv	fc, c	
Snowy heron				av		summer, 1893																		
Louisiana heron																								
Little blue heron																								
Green heron	sr			sr	fc	May 7			Sept. 15, 25	yes	sr		Apr. 28	yes	sr	fc	yes	sr	c		yes	sr	c	
Black-crowned night heron				tv	fc				Aug. 15, Sept. 20		tv											tv	oc	yes
Yellow-crowned night heron				sr	local					14 May '81														
Whooping crane																								
Sandhill crane																								
King rail																		sr	oc			sr	fc	
Clapper rail																								yes
Virginia rail	sr			tv	fc, fall				Oct.		sr				sr	rare		sr	c					
Sora	sr			tv					Oct.		sr				sr	rare		sr	c		yes	sr	c	yes
Yellow rail				tv	rare													sr	c		yes	sr	c	yes
Black rail																		tv	rare			tv	oc	
Corn crake																		av	once, Apr. '82					
Purple gallinule																								
Florida gallinule	sr																							
American coot	tv			tv	fc				Oct.		tv							sr			yes	sr	c	yes
Red phalarope																		tv	c			tv, sr	c, oc	yes
Northern phalarope																								
Wilson phalarope																						tv	oc	
American avocet																								
Black-necked stilt																								
American woodcock	sr		yes	tv, sr	fc, unc	Apr. 1, 8			Oct. 20, Nov. 1	yes	sr				sr		yes	sr			yes	sr	unc	yes
Wilson snipe	tv			tv	fc	Apr.	May 10		Oct. 15, 20		tv				tv	unc		tv, sr	c		?	tv	c	
Dowitcher				tv	rare	25 May '99																tv	rare	
Long-billed dowitcher																								
Stilt sandpiper				tv	rare																	tv	rare	
Knot																								
Purple sandpiper											tv													
Pectoral sandpiper	tv			tv											tv	unc		tv	fc			tv	c	
White-rumped sandpiper	tv																					tv	unc	
Baird sandpiper											tv											tv	oc	
Least sandpiper	tv			tv											tv	unc		tv	fc			tv	fc	
Dunlin																								
Red-backed sandpiper	tv			tv				Oct. 8										tv	oc			tv	fc	
Curlew sandpiper											tv													
Semipalmated sandpiper	tv			tv														tv	fc			tv	c	
Western sandpiper	tv																	tv	fc					
Sanderling	tv																					tv	oc	
Marbled godwit																								
Hudsonian godwit											tv													
Greater yellow-legs	tv			tv		Apr. 15		Aug. 31, Sept.	Oct.		tv				tv	unc		tv	fc			tv	c	
Yellow-legs	tv			tv							tv				tv	unc		tv	c			tv	c	
Solitary sandpiper	tv			tv							tv				tv			tv	fc	May 4		tv	fc	
Willet																								
Ruff											tv, sr													
Bartramian sandpiper	tv, sr	rare	yes	tv, sr	fc	Apr. 15, 24				yes												sr	local	
Buff-breasted sandpiper																								
Spotted sandpiper	sr	c	yes	sr	c	Apr. 30, May 7			Aug. 15	yes, May 30	sr	c		yes	sr	ab, May 4	yes	sr	ab	Apr. 9, 28, May 1	yes	sr	ab	yes
Long-billed curlew																						tv	rare	
Hudsonian curlew	tv																							
Eskimo curlew																								
European curlew																								
Lapwing																								
Black-bellied plover	tv			tv		May 30												tv				tv		
American golden plover	tv			tv	unc										tv	unc		tv				tv	29 Oct. '07	
Killdeer	sr			tv, sr	fc	Mar. 27				yes					tv	fc		sr				sr		yes
Semipalmated plover	tv			tv		May 30												tv				tv		
Piping plover																								
Wilson plover																								
Turnstone																								
American oyster catcher										yes		rare									yes	res	rare	
Bobwhite				res	rare										res	rare		res	rare					
Canada grouse										Apr. 20, June 10	res	fc									yes	res	c	yes
Ruffed grouse	res		yes	res	c									yes	res	c	yes	res	c					
Canadian ruffed grouse	res		yes																					
Willow ptarmigan																								
Heath hen																								
Wild turkey																								
Ring-necked pheasant																								
Passenger pigeon					rare																			
Mourning dove	sr			sr	fc	Mar. 26, 31			Oct. 1	May 9	sr					1897 (last)		sr	fc		yes	sr	c	yes
Ground dove															sr							sv	rare, 1 July '00	
Turkey vulture																								
Black vulture																								
Swallow-tailed kite											sr										yes	sr, res	c, oc	yes
Marsh hawk	sr			sr	fc	Apr. 1			Nov. 1	May 1	tv, sr							sr	c			sr, tv	oc, c	
Sharp-shinned hawk	tv, sr	c, oc		sr, res	fc, oc					May 15	sr				sr			tv, sr	c, oc		yes	sr		
Cooper hawk	sr	unc		sr	fc	Apr. 1				May 10, 27					sr			sr	oc			wv	rare	
American goshawk				wv	oc						res				sr						yes	sr, res	c, oc	yes
Red tailed hawk	sr	fc		res	c					Apr. 1, 10	res							res	c		yes	sr, res	c, oc	yes
Red-shouldered hawk	sr	fc		res	c					Mar. 15, Apr. 18					sr			res	c					
Swainson hawk															sr							tv	oc	
Broad-winged hawk	sr	oc		sr	fc	Apr. 1				Apr. 18, May 13												wv	fc	
American rough-legged hawk																								
Golden eagle											tv											tv	unc	
Bald eagle	res	unc		tv	rare	Apr. 10												tv	unc					
White gyrfalcon																								
Gyrfalcon																								
Black gyrfalcon																						tv	unc	
Duck hawk				tv	rare	10 Apr. '92																tv	unc	
Pigeon hawk	tv			tv							sr								oc		yes	vr	c	yes
American sparrow hawk	sr	fc		sr	c	Apr.				May 12, 27	tv							tv	fc			tv	unc	
American osprey	sr	unc		tv	fc	Apr. 15			Oct. 1						sr		yes	sr	fc			av	once	
American barn owl											res				tv	oc		tv	fc			res		
American long-eared owl	res			res	unc					May 5	tv							res				res	fc	yes
Short-eared owl	tv			tv, sr	oc					yes					res			res	unc					

SPECIES RECORDED	STEUBEN							
	Resident or transient	Common or rare	Arrives from south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north
Wood ibis					av.	once	21 June '90	
American bittern	sr.	c.		yes	sr, tv	fc, c.	Apr. 5	
Least bittern	sr.	unc.			sr.	c, local	Apr. 27, May 15	
Great blue heron	tv.	fc.			tv, sr.	c, local	Apr. 1, 10, 22	
American egret	av.				sv.	rare	July 17, 23, 27	
Snowy heron					sv.	rare	May 7, 30	
Louisiana heron					av.	once	summer, 1836	
Little blue heron					sv.	oc.	Apr. 7, 20, 24	
Green heron	sr.	c.	May 4	yes	sr.	c.	Apr. 10, 17, May 5	
Black-crowned night heron					sr, res.	c, oc	Apr.	
Yellow-crowned night heron					av.		1897	
Whooping crane								
Sandhill crane								
King rail		rare			sr.	rare	Mar. 3, Apr.	
Clapper rail					sr, res.	ab, oc.		
Virginia rail	sr.	c.		yes	tv, sr.	c, fc	Apr. 29	
Sora	sr.	fc.		yes	tv, sr.	ab, oc.	Apr. 28, May 3	
Yellow rail		rare			tv, wv	unc, rare	Apr. 29	
Black rail						rare		
Corn crake					av.	3 times		
Purple gallinule					av.		1879	
Florida gallinule		rare			tv.	rare	May 20, 26	
American coot	tv.	fc.			tv, sr.	fc, irreg, oc		
Red phalarope					tv.	oc.	Apr. 30, May 14, 20	May 27
Northern phalarope					tv.	c.	May 5, 19	June 3
Wilson phalarope					tv.	rare		1 June '87
American avocet					av.		1844, 1847	
Black-necked stilt					av.		1843	
American woodcock	sr.	fc.		yes	sr, res.	c, oc.	Feb. 22, Mar. 12	
Wilson snipe	tv.	fc.	Apr. 4		tv, wv	c, rare	Mar. 15, 25	May 1
Dowitcher					tv.	fc.	Apr. 25, May 9, 12	May 30, June 12
Long-billed dowitcher					tv.	unc.	Mar. 20	
Stilt sandpiper					tv.	fc.	May 18	
Knot					tv.	c, fall	May 15, 20, 23	June 7, 10
Purple sandpiper					wv	unc.		Feb. 11, Mar. 3
Pectoral sandpiper	tv.	unc.			tv.	c, fall	Mar. 22, Apr. 25	May
White-rumped sandpiper					tv.	fc.	May	June
Baird sandpiper					tv.	rare	May	
Least sandpiper	tv.	unc.			tv.	ab.	Apr. 20, 28, May 8	May 26, 29, June
Dunlin					av.	once		
Red-backed sandpiper	tv.	oc.			tv, wv	c, rare	Apr. 1, 6, 17	May 15, 26, June
Curlew sandpiper					av.		24 May '83	
Semipalmated sandpiper	tv.	unc.			tv.	ab.	Apr. 28, May 3, 8	May 30, June 3,
Western sandpiper					tv.	fc.	May	
Sanderling	tv.	oc.			tv.	ab.	Mar. 15, 29, Apr. 8	May 30, June 3,
Marbled godwit					tv.	rare		
Hudsonian godwit					tv.	unc.		
Greater yellow-legs	tv.	fc.	May 3		tv.	c.	Mar. 9, 31, Apr. 8	May 30, June 3,
Yellow-legs	tv.	unc.			tv.	ab, fall	May 6, 9	May 26
Solitary sandpiper	tv.	unc.			tv.	c.	May 5, 10, 16	May 15, 21
Willet					tv.	unc, fall	Apr. 29, May 6	May 11
Ruff								
Bartramian sandpiper					sr, tv	local, fc		
Buff-breasted sandpiper					tv.	rare		
Spotted sandpiper	sr.	ab.	Apr. 21, 28, May 2	yes	sr.	ab.	Apr. 25, 28, May 2	
Long-billed curlew					tv.	rare	Apr. 28	
Hudsonian curlew					tv.	fc.	May 6, 20	May 23, 30
Eskimo curlew					tv.	rare		
European curlew								
Lapwing								
Black-bellied plover	tv.				tv.	c.	May 5, 9, 15	May 30, June 5, 8
American golden plover	tv.				tv.	fc.	7 Apr. '82	May 10
Killdeer	sr.	fc.	Mar. 12, 25		tv, sr.	irreg, oc.	Mar. 1, 5, 18	May 29
Semipalmated plover	tv.				tv.	ab.	Apr. 19, May 11, 18	May 22, 30, June
Piping plover					sr.	unc.	Mar. 3, 24, Apr. 12	
Wilson plover					sv.	rare	May 15, 28	
Turnstone					tv.	ab.	May 1, 12, 23	June 1, 10
American oyster catcher					av.		10 Mar. '80, 2 June '82	
Bobwhite	res.	rare			res.	c.		
Canada grouse								
Ruffed grouse	res.	c.		yes	res.	c, local		
Canadian ruffed grouse								
Willow ptarmigan								
Heath hen					res, formerly		1836, 1840 (last)	
Wild turkey					res, formerly	now extinct		
Ring-necked pheasant								
Passenger pigeon			1875 (last)				1889 (last)	
Mourning dove	sr.	fc.		yes	sr, res.	c, rare	Mar. 15, Apr. 9, 11	
Ground dove								
Turkey vulture	sv.	rare			sv.	oc.	29 Apr. '90	
Black vulture								
Swallow-tailed kite								
Marsh hawk	sr.	unc.		yes	tv, res.	ab, unc.	Mar. 8, 23, Apr. 25	
Sharp-shinned hawk	sr.	fc.		yes	tv, sr.	c, fc.	Mar. 13, Apr. 16, May 3	
Cooper hawk	sr.	c.		yes	sr, res.	fc, oc.	May 13	
American goshawk	wv.	unc.			wv.	rare		Mar. 11, 21, 27
Red-tailed hawk	sr, res.	c, oc.		yes	res.	c.		
Red-shouldered hawk	sr.	unc.		yes	res.	c.		
Swainson hawk								
Broad-winged hawk	tv.	unc.			sr.	fc.		
American rough-legged hawk	wv.	oc.			wv.	c, irreg.		Feb. 24, Mar. 7
Golden eagle					av.			
Bald eagle	tv.	oc.			res.	unc.		
White gyrfalcon					av.	?		
Gyrfalcon					av.			winter, 1856
Black gyrfalcon					av.			
Duck hawk	tv.	rare			tv.	unc.	May 12, 13	
Pigeon hawk	tv.	oc.			tv.	fc.	Feb. 14, Apr. 29	
American sparrow hawk	sr.	c.		yes	tv, res.	c, oc.	Apr. 10, 17	May 1
American osprey	tv.	unc.			sr.	c.	Mar. 20, Apr. 7, 24	
American barn owl					res.	rare		
American long-eared owl	res.	fc.		yes	tv, res.	unc, oc.		
Short-eared owl	tv.	rare			wv, res.	c, unc.		Mar.

			SULLIVAN			TIOGA			
Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Arrives from south	Breeds
	Nov. 1, 15	yes	sr	oc		sr	rare		
	Sept. 2, 6	yes				tv	rare	15 Apr. '91	
	Nov. 11, 20, Dec. 21	yes	tv	oc		tv	fc		
	Aug., Sept.					sv	rare	June '96	
	16 Aug. '81								
	Sept. 13, Oct. 7	May 18, 30				sr	c		yes
	Oct.	May, July							
	2 Nov. '86	yes							
		yes							
	Oct. 13	June		oc		sr	rare		
	Sept. 28, Oct. 24	yes		oc		sr	rare		
5, Oct. 10	Oct. 16, Nov. 11, Jan. 17								
'80, 15 Aug. '85	1 Nov. '89								
'98									
5			tv			tv	unc		
5, 26	Oct. 22, Nov. 28								
3, 26	Oct. 22								
5, 20	Sept. 15								
	Nov. 9, Dec. 5	Mar. 18, Apr. 5	sr			sr	c		yes
, Oct. 1	Nov. 20, Jan. 1		tv			tv	c	Apr. 17	
10, 18	Sept. 1, 8, 15								
6, 23, Aug. 7	Oct. 5, 15, Nov. 30								
2, 16, 26	Sept. 27, Oct. 5, 10								
5, 26, Aug. 13	Oct. 7, 10, 30								
1, Nov. 16, 23									
5, Aug. 15	Oct. 12, Nov. 10								
Aug. 27, 31	Sept. 13, 26, Oct 30								
6, Sept. 2	Sept. 22, Oct. 31								
16, 20	Sept. 20, 25, Oct. 7								
t. '92									
1, Sept. 22	Oct. 19, 30, Nov. 13								
16, 20	Sept. 18, 30, Oct. 15								
7	Sept								
Aug. 1, 13	Sept. 30, Oct. 24, Dec. 8								
0, Aug. 20, 31	Sept. 8, 15								
, 26, 31	Sept. 24, Oct. 5, 9								
0, 20, 29	Oct. 20, 30, Nov. 19		tv	unc		tv	unc		
0, 21	Sept. 12, 21, Oct. 3		tv	oc		tv	oc		
0, Aug. 9, 27	Sept. 25, Oct. 14		tv	c		tv	c		
25, Aug. 8	Aug. 17, 25, Sept. 16								
	Aug. 13, 27, 31	yes							
5, 28	Sept. 13, 16, 17								
	Sept. 12, 21, Oct. 25	May 10, June 5	sr	c	yes	sr	c		yes
, 14	Sept. 6, 12								
18, 23	Sept. 9, 16, Oct. 1								
, 29, Sept. 9	Sept. 16, 30, Oct. 17								
2, 31, Aug. 4	Oct. 2, 15, Nov. 10								
, 10, 24	Oct. 2, 23, Nov. 12								
Aug. 15	Nov. 1, 15, Dec. 14	yes	sr			sr	fc	Apr	May 13
0, Aug. 15, 29	Sept. 6, 23, Oct. 17								
	Aug. 29, Sept. 12, 20	June 3, 20							
0, 26, Aug. 7	Sept. 15, 17, Oct. 5								
		yes	res		yes	res	c		yes
		Apr. 12, 30	res		yes	res	c		yes
	Oct. 4, Nov. 3	Apr. 20, May 2	sr		yes	sr	rare		yes
	15 Aug. '77		sv			sv	1886		
	Oct. 4, Nov. 8, 15	yes	sr			sr	unc		
		May 19, 21	sr			res	unc		
	Sept. 20, Dec. 11, Jan. 13	May 13	sr			sr	rare		
0, 21, Dec. 22						wv	rare		
		yes	res		yes	res	c		yes
		yes	res			sr	c		yes
		May 10				sr	c		yes
Nov. 16, Dec. 26						wv	rare		
'90									
			tv			tv	unc		
, 1877									
, 1879									
7, Oct. 4, 17									
5, 18, 27	Oct. 9, 12					tv	rare		
16, 29	Oct. 9, Nov. 3	Apr. 20, 27	sr			sr	c		yes
	Sept. 20, Nov. 17	Apr. 25, May 15	tv			tv	rare		
		Apr. 25							
		May 5, 30				res	unc		
27, Oct. 12, Nov. 27		May 7							

SPECIES RECORDED	STEUBEN				SUFFOLK							SULLIVAN			TIOGA			
	Resident or transient	Common or rare	Arrives from south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Arrives from south	Breeds
Wood ibis					av	once	21 June '90											
American bittern	sr	c		yes	sr, tv	fc, c	Apr. 5			Nov. 1, 15	yes	sr	oc		sr	rare		
Least bittern	sr	unc			sr	c, local	Apr. 27, May 15			Sept. 2, 6	yes				tv	rare	15 Apr. '91	
Great blue heron	tv	fc			tv, sr	c, local	Apr. 1, 10, 22			Nov. 11, 20, Dec. 21	yes	tv	oc		tv	fc		
American egret	av				sv	rare	July 17, 23, 27			Aug., Sept.					sv	rare	June '96	
Snowy heron					sv	rare	May 7, 30											
Louisiana heron					av	once	summer, 1836											
Little blue heron					sv	oc	Apr. 7, 20, 24			16 Aug. '81								
Green heron	sr	c	May 4	yes	sr	c	Apr. 10, 17, May 5			Sept. 13, Oct. 7	May 18, 30				sr	c		yes
Black-crowned night heron					sr, res	c, oc	Apr			Oct.	May, July							
Yellow-crowned night heron					av		1897											
Whooping crane																		
Sandhill crane																		
King rail		rare			sr	rare	Mar. 3, Apr			2 Nov. '86	yes							
Clapper rail					sr, res	ab, oc					yes							
Virginia rail	sr	c		yes	tv, sr	c, fc	Apr. 20		Sept. 9	Oct. 13	June		oc		sr	rare		
Sora	sr	fc		yes	tv, sr	ab, oc	Apr. 28, May 3			Sept. 28, Oct. 24	yes		oc		sr	rare		
Yellow rail		rare			tv, wv	unc, rare	Apr. 29		Sept. 25, Oct. 10	Oct. 16, Nov. 11, Jan. 17								
Black rail						rare												
Corn crake					av	3 times			2 Nov. '80, 15 Aug. '85	1 Nov. '89								
Purple gallinule					av		1879											
Florida gallinule		rare			tv	rare	May 20, 26		28 Oct. '98									
American coot	tv	fc			tv, sr	fc, irreg, oc			Oct. 15			tv			tv	unc		
Red phalarope					tv	oc	Apr. 30, May 14, 20	May 27	Sept. 15, 20	Oct. 22, Nov. 28								
Northern phalarope					tv	c	May 5, 19	June 3	Aug. 13, 20	Oct. 22								
Wilson phalarope					tv	rare		1 June '87	Aug. 15, 20	Sept. 15								
American avocet					av		1844, 1847											
Black-necked stilt					av		1843											
American woodcock	sr	fc		yes	sr, res	c, oc	Feb. 22, Mar. 12			Nov. 9, Dec. 5	Mar. 18, Apr. 5	sr			sr	c		yes
Wilson snipe	tv	fc	Apr. 4		tv, wv	c, rare	Mar. 15, 25	May 1	Aug. 6, Oct. 1	Nov. 20, Jan. 1		tv			tv	c	Apr. 17	
Dowitcher					tv	fc	Apr. 25, May 9, 12	May 30, June 12	July 4, 10, 18	Sept. 1, 8, 15								
Long-billed dowitcher					tv	unc	Mar. 20		July 16, 23, Aug. 7	Oct. 5, 15, Nov. 30								
Stilt sandpiper					tv	fc	May 18		July 12, 16, 26	Sept. 27, Oct. 5, 10								
Knot					tv	c, fall	May 15, 20, 23	June 7, 10	July 15, 26, Aug. 13	Oct. 7, 10, 30								
Purple sandpiper					wv	unc		Feb. 11, Mar. 3	Oct. 31, Nov. 16, 23									
Pectoral sandpiper	tv	unc			tv	c, fall	Mar. 22, Apr. 25	May	July 15, Aug. 15	Oct. 12, Nov. 10								
White-rumped sandpiper					tv	fc	May	June	July 4, Aug. 27, 31	Sept. 13, 26, Oct 30								
Baird sandpiper					tv	rare	May		Aug. 26, Sept. 2	Sept. 22, Oct. 31								
Least sandpiper	tv	unc			tv	ab	Apr. 20, 28, May 8	May 26, 29, June 12	July 4, 16, 20	Sept. 20, 25, Oct. 7								
Dunlin					av	once			15 Sept. '92									
Red-backed sandpiper	tv	oc			tv, wv	c, rare	Apr. 1, 6, 17	May 15, 26, June 6	Aug. 31, Sept. 22	Oct. 19, 30, Nov. 13								
Curlew sandpiper					av		24 May '83											
Semipalmated sandpiper	tv	unc			tv	ab	Apr. 28, May 3, 8	May 30, June 3, 13	July 4, 16, 20	Sept. 18, 30, Oct. 15								
Western sandpiper					tv	fc	May		July 17	Sept								
Sanderling	tv	oc			tv	ab	Mar. 15, 29, Apr. 8	May 30, June 3, 14	July 4, Aug 1, 13	Sept. 30, Oct. 24, Dec. 8								
Marbled godwit					tv	rare			July 20, Aug. 20, 31	Sept. 8, 15								
Hudsonian godwit					tv	unc			Aug. 8, 26, 31	Sept. 24, Oct. 5, 9								
Greater yellow-legs	tv	fc	May 3		tv	c	Mar. 9, 31, Apr. 8	May 30, June 3, 12	July 10, 20, 29	Oct. 20, 30, Nov. 19		tv	unc		tv	unc		
Yellow-legs	tv	unc			tv	ab, fall	May 6, 9	May 26	July 10, 21	Sept. 12, 21, Oct. 3		tv	oc		tv	oc		
Solitary sandpiper	tv	unc			tv	c	May 5, 10, 16	May 15, 21	July 20, Aug. 9, 27	Sept. 25, Oct. 14		tv	c		tv	c		
Willet					tv	unc, fall	Apr. 29, May 6	May 11	July 4, 25, Aug. 8	Aug. 17, 25, Sept. 16								
Ruff																		
Bartramian sandpiper					sr, tv	local, fc				Aug. 13, 27, 31	yes							
Buff-breasted sandpiper					tv	rare			Aug. 25, 28	Sept. 13, 16, 17								
Spotted sandpiper	sr	ab	Apr. 21, 28, May 2	yes	sr	ab	Apr. 25, 28, May 2			Sept. 12, 21, Oct. 25	May 10, June 5	sr	c	yes	sr	c		yes
Long-billed curlew					tv	rare	Apr. 28		Aug. 5, 14	Sept. 6, 12								
Hudsonian curlew					tv	fc	May 6, 20	May 23, 30	July 2, 18, 23	Sept. 9, 16, Oct. 1								
Eskimo curlew					tv	rare			Aug. 3, 29, Sept. 9	Sept. 16, 30, Oct. 17								
European curlew																		
Lapwing																		
Black-bellied plover	tv				tv	c	May 5, 9, 15	May 30, June 5, 8	July 12, 31, Aug. 4	Oct. 2, 15, Nov. 10								
American golden plover	tv				tv	fc	7 Apr. '82	May 10	Aug. 1, 10, 24	Oct. 2, 23, Nov. 12								
Killdeer	sr	fc	Mar. 12, 25		tv, sr	irreg, oc	Mar. 1, 5, 18	May 29	July 9, Aug. 15	Nov. 1, 15, Dec. 14	yes	sr			sr	fc	Apr	May 13
Semipalmated plover	tv				tv	ab	Apr. 19, May 11, 18	May 22, 30, June 5	July 30, Aug. 15, 29	Sept. 6, 23, Oct. 17								
Piping plover					sr	unc	Mar. 3, 24, Apr. 12			Aug. 29, Sept. 12, 20	June 3, 20							
Wilson plover					sv	rare	May 15, 28											
Turnstone					tv	ab	May 1, 12, 23	June 1, 10	July 10, 26, Aug. 7	Sept. 15, 17, Oct. 5								
American oyster catcher					av		10 Mar. '80, 2 June '82											
Bobwhite	res	rare			res	c					yes	res		yes	res	c		yes
Canada grouse																		
Ruffed grouse	res	c		yes	res	c, local					Apr. 12, 30	res		yes	res	c		yes
Canadian ruffed grouse																		
Willow ptarmigan																		
Heath hen					res, formerly		1836, 1840 (last)											
Wild turkey					res, formerly	now extinct												
Ring-necked pheasant																		
Passenger pigeon			1875 (last)				1889 (last)											
Mourning dove	sr	fc		yes	sr, res	c, rare	Mar. 15, Apr. 9, 11			Oct. 4, Nov. 3	Apr. 20, May 2	sr		yes	sr	rare		yes
Ground dove															sv	1886		
Turkey vulture	sv	rare			sv	oc	29 Apr. '90			15 Aug. '77		sv						
Black vulture																		
Swallow-tailed kite															sr	unc		
Marsh hawk	sr	unc		yes	tv, res	ab, unc	Mar. 8, 23, Apr. 25			Oct. 4, Nov. 8, 15	yes	sr			res	unc		
Sharp-shinned hawk	sr	fc		yes	tv, sr	c, fc	Mar. 13, Apr. 16, May 3				May 19, 21	sr			sr	rare		
Cooper hawk	sr	c		yes	sr, res	fc, oc	May 13		Oct. 10, 21, Dec. 22	Sept. 20, Dec. 11, Jan. 13	May 13	sr			wv	rare		
American goshawk	wv	unc			wv	rare		Mar. 11, 21, 27						yes	res	c		yes
Red tailed hawk	sr, res	c, oc		yes	res	c					yes	res			sr	c		yes
Red-shouldered hawk	sr	unc		yes	res	c					yes	res						
Swainson hawk															sr	c		yes
Broad-winged hawk	tv	unc			sr	fc			Oct. Nov. 16, Dec. 26		May 10				wv	rare		
American rough-legged hawk	wv	oc			wv	c, irreg		Feb. 24, Mar. 7	19 Oct. '90									
Golden eagle					av										tv	unc		
Bald eagle	tv	oc			res	unc						tv						
White gyrfalcon					av	?			winter, 1877									
Gyrfalcon					av			winter, 1856	winter, 1870									
Black gyrfalcon					av				Sept 17, Oct. 4, 17									
Duck hawk	tv	rare			tv	unc	May 12, 13		Sept 6, 18, 27						tv	rare		
Pigeon hawk	tv	oc			tv	fc	Feb. 14, Apr. 29		Sept. 16, 29	Oct. 9, 12					sr	c		yes
American sparrow hawk	sr	c		yes	tv, res	c, oc	Apr. 10, 17	May 1		Oct 9, Nov. 3	Apr. 20, 27	sr			tv	rare		
American osprey	tv	unc			sr	c	Mar. 20, Apr. 7, 24			Sept. 20, Nov. 17	Apr. 25, May 15	tv						
American barn owl					res	rare			Oct.		Apr. 25				res	unc		
American long eared owl	res	fc		yes	tv, res	unc, oc			Sept. 27, Oct. 12, Nov. 27		May 5, 30							
Short-eared owl	tv	rare			wv, res	c, unc		Mar.			May 7							

SPECIES RECORDED	TOMPKINS							ULSTER		
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Br
Wood ibis								av	once, 8 July '84	
American bittern	sr	c	Apr. 8, 14					sv, sr	fc, oc	
Least bittern	sr	fc	May 12				June 5	sr	oc	
Great blue heron	tv	c	Mar. 30					tv	fc	
American egret										
Snowy heron										
Louisiana heron										
Little blue heron										
Green heron	sr	c	Apr. 26				May 12, 18	sr		
Black-crowned night heron	tv	fc, fall						tv		
Yellow-crowned night heron										
Whooping crane										
Sandhill crane										
King rail	sr	rare				27 Nov. '01				
Clapper rail										
Virginia rail	sr	fc	Apr. 24, May 4				yes, June 1	sr		
Sora	sr	c	Apr. 29, May 8				yes	sr		
Yellow rail										
Black rail										
Corn crake										
Purple gallinule										
Florida gallinule	tv, sr	unc, oc	Apr. 28				1877			
American coot	tv	fc					May 25	tv		
Red phalarope										
Northern phalarope										
Wilson phalarope										
American avocet										
Black-necked stilt										
American woodcock	sr, tv	unc, fc					yes	tv, sr	fc, unc	
Wilson snipe	tv	c	Apr.	May 16				tv	fc	
Dowitcher										
Long-billed dowitcher										
Stilt sandpiper										
Knot										
Purple sandpiper										
Pectoral sandpiper	tv	fc						tv		
White-rumped sandpiper										
Baird sandpiper										
Least sandpiper	tv	fc	May 20					tv		
Dunlin										
Red-backed sandpiper	tv	fc			Oct. 12	Oct. 29		tv		
Curlew sandpiper										
Semipalmated sandpiper	tv	c				Oct. 12, 29		tv		
Western sandpiper										
Sanderling								tv		
Marbled godwit										
Hudsonian godwit	tv	rare				5 Nov. '78				
Greater yellow-legs	tv	fc	May 7					tv		
Yellow-legs	tv	fc	May 11	June 1				tv		
Solitary sandpiper	tv	c	Apr. 28, May 1, 7	May 12, 16	Aug.	Oct. 10		tv		
Willet										
Ruff										
Bartramian sandpiper										
Buff-breasted sandpiper										
Spotted sandpiper	sr	c	Apr. 21, 25, 30			Sept.	yes	sr	c	yes
Long-billed curlew										
Hudsonian curlew										
Eskimo curlew										
European curlew										
Lapwing										
Black-bellied plover	tv	fc, fall			Oct. 12	Oct. 29		tv	oc	
American golden plover								tv	oc	
Killdeer	sr	c	Mar. 9, 12				yes	tv	oc	
Semipalmated plover	tv	c	May 11					tv	fc	
Piping plover										
Wilson plover										
Turnstone	tv	rare		June 3						
American oyster catcher										
Bobwhite	res	rare						res		
Canada grouse										
Ruffed grouse	res	fc					yes	res	c	yes
Canadian ruffed grouse	res	rare								
Willow ptarmigan										
Heath hen										
Wild turkey										
Ring-necked pheasant										
Passenger pigeon			1892 (last)							
Mourning dove	sr	fc	Mar. 18, Apr. 12				yes	sr		yes
Ground dove										
Turkey vulture								sv	rare, 1 Sept. '96	
Black vulture										
Swallow-tailed kite										
Marsh hawk	sr	fc	Mar. 29				yes	sr		
Sharp-shinned hawk	sr, res	fc, oc	Mar. 31, Apr. 6			Oct. 30	yes	sr		
Cooper hawk	sr, res	fc, oc	Mar. 17, 25, 28				Apr. 27	sr		
American goshawk	wv	rare		Mar. 4				wv		
Red-tailed hawk	sr, res	c, oc					Apr. 5	res		
Red-shouldered hawk	sr, res	fc, unc					May 4	res		
Swainson hawk										
Broad-winged hawk	tv	c						tv		
American rough-legged hawk	wv	irreg		Mar. 17	Oct. 29			wv		
Golden eagle									rare	
Bald eagle	res	rare						res		
White gyrfalcon										
Gyrfalcon										
Black gyrfalcon										
Duck hawk	tv	oc						sr	rare	
Pigeon hawk	tv	unc						tv	oc	
American sparrow hawk	sr, res	fc, oc	Mar. 30				yes	sr		
American osprey	tv	oc						tv	fc	
American barn owl										
American long-eared owl	res	fc						res		
Short-eared owl	wv, res	fc								

WARREN			WASHINGTON					WAYNE		
ident or nsient	Common or rare	Breeds	Resident or transient	Common or rare	Arrives from south	Departs for south	Breeds	Resident or transient	Common or rare	Breeds
	unc		sr		Apr. 6	Oct. 16	May 30	sr	c	yes
	fc, oc		tv, sr	fc, local		Oct. 28, Nov. 20	yes	sr	fc	yes
	once							tv, sr	fc	yes
	c	yes	sr	ab	Apr. 27		May 20	sr	c	yes
	fc		sr	fc			May 22	tv	oc	
	fc		sr	rare				sr	fc	yes
	fc		sr	fc				sr	fc	yes
								sr	fc	yes
	fc		tv	fc				tv, sr	c, oc	yes
	fc									
	fc	yes	sr	fc	Mar. 28	Nov. 20	Apr. 30	sr	fc	yes
			tv, sr	c, rare	Apr.	Oct.	yes	tv, sr	c, oc	
			tv					tv	fc	
								tv	oc	
			tv					tv	fc	
			tv					tv	fc	
			tv					tv	c	
			tv					tv	oc	
			tv					tv	c	
			tv					tv	fc	
	c		tv, sr	fc				tv	fc	
		yes	sr	unc			yes	sr	unc	
	c	yes	sr	ab	May 6		May 25	sr	c	yes
								tv		
								tv		
			sr	c			May 22	sr	fc	yes
			tv					tv	c	
								tv	oc	
	rare		res	rare				res	rare	yes
	c	yes	res	ab			May 5	res	fc	yes
	oc							res		yes
	last seen 1880			1863 (roost)	1893 (last)					
	rare		sr	unc			yes	sr	c	yes
								av	Apr. 22	
	unc	yes	sr	c	Apr. 1	Nov	May 15	sr	fc	yes
	fc	yes	sr	fc			May 24	tv, sr	c, oc	yes
	c	yes	sr	c			May 12	tv, sr	fc, unc	yes
			wv	fc				wv, tv	unc	
	c	yes	sr	ab		Nov. 15	Apr. 8	sr	c	yes
	fc	yes	sr	ab		Nov	Apr. 25	sr	c	yes
			sr	fc			May 19	tv, sr	c, rare	
			tv					wv	irreg	
			sr	rare			yes, formerly			
	c		sr	rare			yes	res	unc	
			sr					tv	rare	
			tv	oc				tv	unc	
			sr	fc			May 9	sr	unc	yes
			tv, sr	fc, oc				tv	fc	
								res	?	yes
		yes	res	fc				res		
			tv					wv, res	fc, oc	

SPECIES RECORDED	TOMPKINS							ULSTER			WARREN			WASHINGTON					WAYNE		
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Arrives from south	Departs for south	Breeds	Resident or transient	Common or rare	Breeds
Wood ibis								av	once, 8 July '84												
American bittern	sr	c	Apr. 8, 14					sv, sr	fc, oc		sr	unc		sr		Apr. 6	Oct. 16	May 30	sr	c	yes
Least bittern	sr	fc	May 12				June 5	sr	oc										sr	fc	yes
Great blue heron	tv	c	Mar. 30					tv	fc		tv, sr	fc, oc		tv, sr	fc, local		Oct. 28, Nov. 20	yes	tv, sr	fc	yes
American egret											av	once									
Snowy heron																					
Louisiana heron																					
Little blue heron																					
Green heron	sr	c	Apr. 26				May 12, 18	sr			sr	c	yes	sr	ab	Apr. 27		May 20	sr	c	yes
Black-crowned night heron	tv	fc, fall						tv			tv	fc		sr	fc			May 22	tv	oc	
Yellow-crowned night heron																					
Whooping crane																					
Sandhill crane																					
King rail	sr	rare				27 Nov. '01															
Clapper rail																					
Virginia rail	sr	fc	Apr. 24, May 4				yes, June 1	sr			sr	fc		sr	rare				sr	fc	yes
Sora	sr	c	Apr. 29, May 8				yes	sr			sr	fc		sr	fc				sr	fc	yes
Yellow rail																					
Black rail																					
Corn crake																					
Purple gallinule																					
Florida gallinule	tv, sr	unc, oc	Apr. 28				1877												sr	fc	yes
American coot	tv	fc					May 25	tv			tv	fc		tv	fc				tv, sr	c, oc	yes
Red phalarope																					
Northern phalarope											tv	fc									
Wilson phalarope																					
American avocet																					
Black-necked stilt																					
American woodcock	sr, tv	unc, fc					yes	tv, sr	fc, unc		sr	fc	yes	sr	fc	Mar. 28	Nov. 20	Apr. 30	sr	fc	yes
Wilson snipe	tv	c	Apr.	May 16				tv	fc		tv			tv, sr	c, rare	Apr.	Oct.	yes	tv, sr	c, oc	
Dowitcher																					
Long-billed dowitcher																					
Stilt sandpiper																					
Knot																					
Purple sandpiper																					
Pectoral sandpiper	tv	fc						tv			tv			tv					tv	fc	
White-rumped sandpiper																			tv	oc	
Baird sandpiper																					
Least sandpiper	tv	fc	May 20					tv			tv			tv					tv	fc	
Dunlin																					
Red-backed sandpiper	tv	fc			Oct. 12	Oct. 29		tv			tv			tv					tv	fc	
Curlew sandpiper																					
Semipalmated sandpiper	tv	c				Oct. 12, 29		tv			tv			tv					tv	c	
Western sandpiper																					
Sanderling								tv			tv								tv	oc	
Marbled godwit														tv							
Hudsonian godwit	tv	rare				5 Nov. '78															
Greater yellow-legs	tv	fc	May 7					tv			tv								tv	c	
Yellow-legs	tv	fc	May 11	June 1				tv			tv			tv					tv	fc	
Solitary sandpiper	tv	c	Apr. 28, May 1, 7	May 12, 16	Aug.	Oct. 10		tv			tv	c		tv, sr	fc				tv	fc	
Willet																					
Ruff																					
Bartramian sandpiper											sr							yes	sr	unc	
Buff-breasted sandpiper													yes	sr	unc						
Spotted sandpiper	sr	c	Apr. 21, 25, 30			Sept.	yes	sr	c	yes	sr	c	yes	sr	ab	May 6		May 25	sr	c	yes
Long-billed curlew																					
Hudsonian curlew																					
Eskimo curlew																					
European curlew																					
Lapwing																					
Black-bellied plover	tv	fc, fall			Oct. 12	Oct. 29		tv	oc										tv		
American golden plover																			tv		
Killdeer	sr	c	Mar. 9, 12					tv	oc		sr							May 22	sr	fc	yes
Semipalmated plover	tv	c	May 11				yes	tv	oc		tv			sr	c				tv	c	
Piping plover								tv	fc					tv							
Wilson plover																					
Turnstone	tv	rare																	tv	oc	
American oyster catcher				June 3																	
Bobwhite	res	rare																	res	rare	yes
Canada grouse								res				rare		res	rare						
Ruffed grouse	res	fc									res							May 5	res	fc	yes
Canadian ruffed grouse	res	rare					yes	res	c	yes	res	c	yes	res	ab						
Willow ptarmigan																					
Heath hen																					
Wild turkey																					
Ring-necked pheasant																			res		yes
Passenger pigeon			1892 (last)								oc										
Mourning dove	sr	fc	Mar. 18, Apr. 12								sr	last seen 1880			1863 (roost)	1893 (last)		yes	sr	c	yes
Ground dove							yes	sr		yes		rare									
Turkey vulture														sr	unc				av	Apr. 22	
Black vulture								sv	rare, 1 Sept. '96												
Swallow-tailed kite																					
Marsh hawk	sr	fc	Mar. 29								sr								sr	fc	yes
Sharp-shinned hawk	sr, res	fc, oc	Mar. 31, Apr. 6				yes	sr			sr	unc	yes	sr	c	Apr. 1	Nov.	May 15	tv, sr	c, oc	yes
Cooper hawk	sr, res	fc, oc	Mar. 17, 25, 28			Oct. 30	yes	sr			sr	fc	yes	sr	fc			May 24	tv, sr	fc, unc	yes
American goshawk	wv	rare					Apr. 27	sr			wv	c	yes	sr	c			May 12	wv, tv	unc	
Red-tailed hawk	sr, res	c, oc		Mar. 4				wv			sr			wv	fc		Nov. 15	Apr. 8	sr	c	yes
Red-shouldered hawk	sr, res	fc, unc					Apr. 5	res			sr	c	yes	sr	ab		Nov.	Apr. 25	sr	c	yes
Swainson hawk							May 4	res				fc	yes	sr	ab						
Broad-winged hawk	tv	c																May 19	tv, sr	c, rare	
American rough-legged hawk	wv	irreg						tv			sr								wv	irreg	
Golden eagle				Mar. 17	Oct. 29			wv						sr	fc			yes, formerly			
Bald eagle	res	rare							rare		res			tv				yes	res	unc	
White gyrfalcon								res						sr	rare						
Gyrfalcon											c			sr	rare						
Black gyrfalcon																					
Duck hawk	tv	oc																	tv	rare	
Pigeon hawk	tv	unc						sr	rare										tv	unc	
American sparrow hawk	sr, res	fc, oc	Mar. 30					tv	oc		tv			sr	oc			May 9	sr	unc	yes
American osprey	tv	oc					yes	sr			sr			tv	fc				tv	fc	
American barn owl								tv	fc		tr, tv			sr	fc, oc				res	?	yes
American long-eared owl	res	fc												tv, sr					res		
Short-eared owl	wv, res	fc						res			tv		yes	res	fc				wv, res	fc, oc	
														tv							

SPECIES RECORDED	WESTCHESTER						
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Bre
Wood ibis							
American bittern	sr	unc	Apr. 4, 11			Oct.	May 26
Least bittern	sr	fc	May 7			Aug. 10	May, June
Great blue heron	tv, sr	c, rare	Mar. 24, Apr. 6			Nov.	yes
American egret	av	once				Sept. '70	
Snowy heron	av						
Louisiana heron							
Little blue heron							
Green heron	sr	c	Apr. 6, 21			Oct. 2, 20	yes
Black-crowned night heron	sr	c	Apr. 6, 25			Oct. 20	yes
Yellow-crowned night heron							
Whooping crane							
Sandhill crane							
King rail							
Clapper rail	av						
Virginia rail	sr	fc				Sept. 29, Nov. 11	
Sora	tv	c	May		Aug. 19	Oct. 24	
Yellow rail							
Black rail							
Corn crake							
Purple gallinule							
Florida gallinule	sr	rare	June 5			Sept. 26, Nov. 5	
American coot	tv	c	Apr. 28	May 16	Sept. 22	Nov. 13	
Red phalarope							
Northern phalarope							
Wilson phalarope							
American avocet							
Black-necked stilt							
American woodcock	sr	c	Feb. 19			Dec. 2	yes
Wilson snipe	tv	fc	Mar. 20	May 6, 14	Oct. 6	Nov. 20	
Dowitcher							
Long-billed dowitcher							
Stilt sandpiper							
Knot							
Purple sandpiper							
Pectoral sandpiper	tv	unc			Sept. 10	Oct. 16	
White-rumped sandpiper	tv	rare			Sept		
Baird sandpiper							
Least sandpiper	tv	c	May 9	May 22		Oct. 3	
Dunlin							
Red-backed sandpiper	tv	fc			Oct. 3	Oct. 24	
Curlew sandpiper							
Semipalmated sandpiper	tv	c	May 9	May 24	Aug. 24	Oct. 20	
Western sandpiper							
Sanderling	tv	c		June 5	Sept. 9	Oct. 5	
Marbled godwit							
Hudsonian godwit							
Greater yellow-legs	tv	c		June 5		Oct. 28	
Yellow-legs	tv	c			Aug. 25	Oct. 5	
Solitary sandpiper	tv	c	Apr. 30, May 3	May 30	Aug. 27	Oct. 2	
Willet	av						
Ruff							
Bartramian sandpiper							
Buff-breasted sandpiper							
Spotted sandpiper	sr	c	Apr. 29			Oct. 3	yes
Long-billed curlew	av						
Hudsonian curlew							
Eskimo curlew							
European curlew							
Lapwing							
Black-bellied plover	tv	rare					
American golden plover							
Killdeer	tv	rare			Sept. 28	Oct. 25, Nov. 21	
Semipalmated plover	tv	c			Aug. 23	Sept. 20	
Piping plover	av		1898				
Wilson plover							
Turnstone	av						
American oyster catcher							
Bobwhite	res	c					yes
Canada grouse	res	unc					yes
Ruffed grouse		fc					yes
Canadian ruffed grouse							
Willow ptarmigan							
Heath hen							
Wild turkey							
Ring-necked pheasant							
Passenger pigeon			11 Oct. '88 (last)				formerly
Mourning dove	sr	c	Mar. 3			Nov 27	yes
Ground dove							
Turkey vulture	av						
Black vulture							
Swallow-tailed kite	av	once					
Marsh hawk	sr	fc	Mar. 6, 24			Oct. 30	yes
Sharp-shinned hawk	res	c					yes
Cooper hawk	res	c					yes
American goshawk	wv	rare		Jan. 14	Oct. 10		
Red-tailed hawk	res	c					yes
Red-shouldered hawk	res	c					yes
Swainson hawk							
Broad-winged hawk	tv, sr	c, unc	Mar. 15			Oct. 23	
American rough-legged hawk	wv	rare					
Golden eagle	av					16 Nov. '77	
Bald eagle	res	fc					yes
White gyrfalcon							
Gyrfalcon							
Black gyrfalcon							
Duck hawk	wv	rare					
Pigeon hawk	tv	fc	Apr. 1, 14	May 11, 13	Aug. 10	Oct. 15	
American sparrow hawk	res	fc					yes
American osprey	tv	c	Apr. 3, 15	May 7, 23	Sept. 29	Oct. 20	
American barn owl	av		Jan. '73				
American long-eared owl	res	fc					Mar. 31
Short-eared owl		rare					

WYOMING			YATES						
dent r ient	Common or rare	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds
	fc	yes	sr	fc	Apr. 24			Oct. 10	May 23, 30, July 1
			sr	fc	May 16			Aug. 10	May 24, June 20
	fc		tv, sr	c, local	Mar. 24, Apr. 6			Nov 20, Dec. 28	Apr. 25, May 3, 17
			sv	twice					
	fc		sr	c	Apr. 21, 30			Sept. 1, Oct. 1	May 13, 22, June 25
			sr	fc	Apr. 7, 18				May 12, 24, June 12
			sr	fc	Apr. 13, 21, 30			Oct. 2	May 14, 20, July 3
			tv	rare			20 Sept. '72		
			av	once					
			sr	unc					May 23, June 10
			tv	c	Apr. 6, May 2		Sept. 15	Oct. 26, Dec. 21	
			tv	rare	16 May, '95				
	fc		sr	fc	Mar. 13			Oct. 22	Apr. 4, 12, May 17
	fc		tv, res	c, oc	Mar. 5, Apr. 6, 12			Oct. 22, Nov. 7	May 1, 12
			tv	rare				Oct. '75	
			tv	rare			Sept. 3, 11	Oct. 15	
			tv	rare			14 Sept. '04		
			tv	c			July 27, Aug. 10	Nov. 12, 23	
			tv	rare			Sept. 29, Oct. 11		
			tv	c	May 15, 20	May 30	July 26, Aug. 7	Sept. 15, Aug. 2	
			tv	oc					
			tv	c	May 20	June 3	July 31	Sept	
			tv	fc	May 25	June 4		Sept	
			tv					Oct. 29	
	oc		tv	c	Apr. 9, 21	May 12, 17	Aug. 26, Sept. 10	Nov. 7, 15	
	oc		tv	c	Apr. 28, May 10	May 18, 30	July 27, Aug. 13	Oct. 1, 21	
	fc		tv	c	May 4, 10	May 19, 25	Aug. 1, 12	Sept. 23, Oct. 18	
			tv	rare				15 Oct. '74	
	c	yes	sr	ab	May 15, 30			Aug. 29, Sept. 8	May 15, 25, June 30
			tv	rare	29 May, '95	June 2			
	rare, (1896)								
			tv	unc	May 22	June 2	Sept. 11, 29	Oct. 22	
			tv	oc			Sept	Oct. 6	
		yes	sr	c	Mar. 1, 13, 30			Nov. 7, 16, Dec. 23	May 5, 26
			tv	c	May 10, 18, 23	May 23, 30	July 28, Aug. 11	Sept. 3, 30	
			av						
			tv	rare					
			res	rare					June 2, 26
		yes	res	c					Apr. 20, May 5, 19
			res						yes
				50, June, '80					
	fc	yes	sr	c	Mar. 18, 25, Apr. 10				Apr. 30, May 25, Aug. 18
			sv	rare					
			tv, sr	fc	Apr. 1, 10				May 17, June 2, 14
			sr	fc	Mar. 17, Apr. 10				May 7, 16, June 8
			sr, res	c, oc	Apr. 2, 8				May 1, 15, 20
			wv	rare			Sept., Nov		
	c, oc		sr, res	c, oc	Mar. 5, 12				Mar. 26, Apr. 10, May 8
	c		sr	ab	Mar. 10				Apr. 6, 25, May 12
			tv	rare			10 Sept. '75		
			wv	oc			Nov. 8		
	oc		tv	oc	May 22		Aug. 18, 27	Sept. 7, 23	
			tv	rare					
	oc								
	fc	yes	sr	c	Mar. 4, 20				May 15, 20, June 26
	oc		tv	oc	Apr. 8, 20	May 7	Sept. 8	Oct. 29	
			av						
			res	fc					Mar. 31, Apr. 10, 19
				unc					

SPECIES RECORDED	WESTCHESTER							WYOMING			YATES						
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds
Wood ibis											sr	fc	Apr. 24			Oct. 10	May 23, 30, July 1
American bittern	sr	unc	Apr. 4, 11			Oct.	May 26	sr	fc	yes	sr	fc	May 16			Aug. 10	May 24, June 20
Least bittern	sr	fc	May 7			Aug. 10	May, June				tv, sr	c, local	Mar. 24, Apr. 6			Nov 20, Dec. 28	Apr. 25, May 3, 17
Great blue heron	tv, sr	c, rare	Mar. 24, Apr. 6			Nov	yes	tv	fc		sv	twice					
American egret	av	once				Sept. '70											
Snowy heron	av																
Louisiana heron																	
Little blue heron											sr	c	Apr. 21, 30			Sept. 1, Oct. 1	May 13, 22, June 25
Green heron	sr	c	Apr. 6, 21			Oct. 2, 20	yes	tv	fc								
Black-crowned night heron	sr	c	Apr. 6, 25			Oct. 20	yes										
Yellow-crowned night heron																	
Whooping crane																	
Sandhill crane																	
King rail																	
Clapper rail	av										sr	fc	Apr. 7, 18				May 12, 24, June 12
Virginia rail	sr	fc				Sept.29, Nov. 11		tv			sr	fc	Apr 13, 21, 30			Oct. 2	May 14, 20, July 3
Sora	tv	c	May		Aug. 19	Oct. 24		tv			tv	rare			20 Sept. '72		
Yellow rail											av	once					
Black rail																	
Corn crake																	
Purple gallinule											sr	unc					May 23, June 10
Florida gallinule	sr	rare	June 5			Sept. 26, Nov. 5					tv	c	Apr. 6, May 2		Sept. 15	Oct. 26, Dec. 21	
American coot	tv	c	Apr. 28	May 16	Sept. 22	Nov. 13		tv									
Red phalarope											tv	rare	16 May, '95				
Northern phalarope																	
Wilson phalarope																	
American avocet																	
Black-necked stilt																Oct. 22	Apr. 4, 12, May 17
American woodcock	sr	c	Feb. 19			Dec. 2	yes	sr	fc		sr	fc	Mar. 13			Oct. 22, Nov. 7	May 1, 12
Wilson snipe	tv	fc	Mar. 20	May 6, 14	Oct. 6	Nov. 20		tv	fc		tv, res	c, oc	Mar. 5, Apr. 6, 12				
Dowitcher																	
Long-billed dowitcher																Oct. '75	
Stilt sandpiper											tv	rare			Sept. 3, 11	Oct. 15	
Knot											tv	rare			14 Sept. '04		
Purple sandpiper											tv	rare			July 27, Aug. 10	Nov. 12, 23	
Pectoral sandpiper	tv	unc			Sept. 10	Oct. 16					tv	c			Sept. 29, Oct. 11		
White-rumped sandpiper	tv	rare			Sept						tv	rare					
Baird sandpiper																	
Least sandpiper	tv	c	May 9	May 22		Oct. 3					tv	c	May 15, 20	May 30	July 26, Aug. 7	Sept. 15, Aug. 2	
Dunlin																	
Red-backed sandpiper	tv	fc			Oct. 3	Oct. 24					tv	oc					
Curlew sandpiper																Sept	
Semipalmated sandpiper	tv	c	May 9	May 24	Aug. 24	Oct. 20					tv	c	May 20	June 3	July 31		
Western sandpiper																Sept	
Sanderling	tv	c		June 5	Sept. 9	Oct. 5					tv	fc	May 25	June 4			
Marbled godwit																Oct. 29	
Hudsonian godwit											tv				Aug. 26, Sept. 10	Nov. 7, 15	
Greater yellow-legs	tv	c		June 5		Oct. 28		tv	oc		tv	c	Apr. 9, 21	May 12, 17		Oct. 1, 21	
Yellow-legs	tv	c			Aug. 25	Oct. 5		tv	oc		tv	c	Apr. 28, May 10	May 18, 30	July 27, Aug. 23	Sept. 23, Oct. 18	
Solitary sandpiper	tv	c	Apr. 30, May 3	May 30	Aug. 27	Oct. 2		tv	fc		tv	c	May 4, 10	May 19, 25	Aug. 1, 12		
Willet	av																
Ruff																	
Bartramian sandpiper																15 Oct. '74	
Buff-breasted sandpiper											tv	rare				Aug. 29, Sept. 8	May 15, 25, June 30
Spotted sandpiper	sr	c	Apr. 29			Oct. 3	yes	sr	c	yes	sr	ab	May 15, 30				
Long-billed curlew	av																
Hudsonian curlew											tv	rare	29 May, '95	June 2			
Eskimo curlew								tv	rare, (1896)								
European curlew																	
Lapwing															Sept. 11, 29	Oct. 22	
Black-bellied plover	tv	rare											May 22	June 2		Oct. 6	
American golden plover											tv	unc			Sept	Nov. 7, 16, Dec. 23	May 5, 26
Killdeer	tv	rare			Sept. 28	Oct. 25, Nov. 21					tv	oc				Sept. 3, 30	
Semipalmated plover	tv	c			Aug. 23	Sept. 20		sr		yes	sr	c	Mar. 1, 13, 30	May 23, 30	July 28, Aug. 11		
Piping plover	av		1898								tv	c	May 10, 18, 23				
Wilson plover																	
Turnstone	av										av						
American oyster catcher											tv	rare					June 2, 26
Bobwhite	res	c					yes				res	rare					Apr. 20, May 5, 19
Canada grouse	res	unc					yes										
Ruffed grouse		fc					yes	res			res	c					
Canadian ruffed grouse										yes							
Willow ptarmigan																	
Heath hen																	yes
Wild turkey																	
Ring-necked pheasant											res						Apr. 30, May 25, Aug. 18
Passenger pigeon			11 Oct. '88 (last)				formerly					50, June, '80					
Mourning dove	sr	c	Mar. 3			Nov 27	yes	sr	fc	yes	sr	c	Mar. 18, 25, Apr. 10				
Ground dove																	
Turkey vulture	av										sv	rare					
Black vulture																	May 17, June 2, 14
Swallow-tailed kite	av	once															May 7, 16, June 8
Marsh hawk	sr	fc	Mar. 6, 24			Oct. 30	yes	sr									May 1, 15, 20
Sharp-shinned hawk	res	c					yes	sr			tv, sr	fc	Apr. 1, 10				
Cooper hawk	res	c					yes	sr			sr	fc	Mar. 17, Apr. 10				
American goshawk	wv	rare									sr, res	c, oc	Apr. 2, 8		Sept., Nov		Mar. 26, Apr. 10, May 8
Red-tailed hawk	res	c		Jan. 14	Oct. 10		yes	sr, res			wv	rare					Apr. 6, 25, May 12
Red-shouldered hawk	res	c					yes	sr	c, oc		sr, res	c, oc	Mar. 5, 12				
Swainson hawk								sr	c		sr	ab	Mar. 10				
Broad-winged hawk	tv, sr	c, unc	Mar. 15			Oct. 23									10 Sept. '75		
American rough-legged hawk	wv	rare									tv	rare			Nov. 8		
Golden eagle	av					16 Nov. '77					wv	oc					
Bald eagle	res	fc					yes								Aug. 18, 27	Sept. 7, 23	
White gyrfalcon								tv	oc		tv	oc	May 22				
Gyrfalcon																	
Black gyrfalcon																	
Duck hawk	wv	rare															May 15, 20, June 26
Pigeon hawk	tv	fc	Apr. 1, 14	May 11, 13	Aug. 10	Oct. 15		tv			tv	rare					
American sparrow hawk	res	fc					yes	sr	oc								
American osprey	tv	c	Apr. 3, 15	May 7, 23	Sept. 29	Oct. 20		tv	fc	yes	sr	c	Mar. 4, 20	May 7	Sept. 8	Oct. 29	
American barn owl	av		Jan. 73						oc		tv	oc	Apr. 8, 20				Mar. 31, Apr. 10, 19
American long-eared owl	res	fc					Mar. 31	av									
Short-eared owl		rare						res			res	fc					
												unc					

SPECIES RECORDED	GIRAUD, LONG ISLAND, 1844							DE KAY, NEW YORK STATE, 1844
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient
Barred owl		occurs						Common
Great gray owl								Will doubtless be found within State
Richardson owl								
Saw-whet owl		rare						Called Littleowl or Saw-whet in this State
Screech owl		ab						Exclusively belonging to the Union
Great horned owl		unc					yes	Throughout the continent
Snowy owl	wv	unc						Not an uncommon visitor in severe winters
American hawk owl								Rare visitor except in more northern counties. Breeds?
Burrowing owl								
Carolina paroquet								In 1795 middle of winter, large flock near Albany
Yellow-billed cuckoo	sr	c	May 15				June	Not very common, May to autumn in every part of State. Br
Black-billed cuckoo	sr	c						May to autumn. Breeds
Belted kingfisher	sr	fc				fall	yes	Resident nearly the whole year. Breeds
Hairy woodpecker	res						yes	Constant resident
Downy woodpecker	res						yes	Resident
Arctic three-toed woodpecker								Rare in Atlantic district. Numerous in Hamilton & Herkime
Am. three-toed woodpecker								Banded woodpecker. Northern part of State
Yellow-bellied sapsucker		unc						sr. Breeds
North. pileated woodpecker								Particularly abundant in uncleared forests. Almost unknow
Red-headed woodpecker	sr, wv	fc, oc	Apr. early			fall, late		May to Sept. Breeds. Sometimes winters....[Atlantic dist
Red-bellied woodpecker		fc					May 1	Not very abundant. Summer resident. Breeds
Northern flicker	tv, wv	rare						sr. A few remain during year
Whip-poor-will	sr	c	May 1				May, late	Arrives end of Apr. Breeds
Nighthawk	sr		May, early			Aug. late	May, late	Appears at same time with Whip-poor-will
Chimney swift	sr		May, early				2 broods	Appears latter end of Apr. Breeds
Ruby-throated hummingbird	sr	c	May 1			Sept. late	May, late	May to Oct. Breeds. Warm season in great numbers
Kingbird	sr		May				yes	Last of Apr. to Sept. or Oct. Common. Breeds in every pa
Gray kingbird								[S
Arkansas kingbird								
Crested flycatcher	sr	c	May 15			Sept. late; Oct. early		Rare in our State
Phoebe	sr		Mar. early			fall, late	2 broods	Last of Mar. to Oct. or Nov. Breeds in every part of State
Olive-sided flycatcher								Doubtless breeds in State, but have never met with a specimen
Wood pewee	sr		May, late					Appears middle of May. Breeds
Yellow-bellied flycatcher								One specimen from L. I.
Green-crested flycatcher	sr		May, late			Sept. early		Appears early in May. Breeds
Alder flycatcher								
Least flycatcher		unc					few, (?)	Confused with Green-crested
Skylark								
Horned lark	wv			Mar., late	Oct., late			Winter visitor. Numerous at times
Hoyt horned lark								
Prairie horned lark								
Blue jay	res	ab, spring					yes	Common resident. Breeds
Canada jay								Rare, except in northern districts. Breeds
Northern raven		oc						Rare, except in northern districts, common. Breeds
American crow	tv, res	ab, c					yes	Constant resident. Less numerous in northern and western d
Fish crow								Occasionally seen on shores of L. I.
Starling								
Bobolink	sr	ab	May, late				yes	First week in May to Oct. Breeds
Cowbird	tv	ab	Apr., early		Sept., late			Apr. to Oct.
Yellow-headed blackbird								
Red-winged blackbird	sr	ab	Apr. 1				May, early	Mar. to Nov. Well known in every part of State
Meadowlark	res	c					yes	Well known in all parts of State. Breeds. Sometimes winte
Orchard oriole	sr	c	May			Sept	yes	More common than Baltimore in southern part of State. Ma
Baltimore oriole	sr	fc					yes	sr. Breeds
Bullock oriole								
Rusty blackbird	tv	fc	Apr., early			Sept., late		Apr. to Nov. Sometimes Jan. Breeds in Adirondacks
Purple grackle	sr	c	Apr. 1			fall, late	yes	sr. Breeds. Apr. to autumn
Bronzed grackle								Included with preceding
Evening grosbeak								
Pine grosbeak	wv	c, 1827, '43						Visits sparingly Atlantic district. Probably breeds in northern
House sparrow								[tr
Chaffinch								
Greenfinch								
Purple finch	sv, wv	oc, ab		May 15	fall			In Atlantic district May, Nov., Jan. Breeds in northern dist
American crossbill	wv	unc						May be considered as breeding in State.....[Doubtless bre
White-winged crossbill	wv	rare						Common along Lake Ontario. Rare in southern part of S
Hoary redpoll								Mealy redpoll. Have never met with it in this State
Redpoll	wv							wv
Holboell redpoll								
Greater redpoll								
European linnet								
American goldfinch	res						yes	Well known. Found at all seasons. Breeds
Pine siskin	tv	ab, irreg.			fall			Observed from Oct. to Mar.
European goldfinch								
Snowflake	wv				Dec., early			In Atlantic district after severe snowstorms. May breed in Ad
Lapland longspur	av							Occasional wv. Winter 1838 numbers shot on L. I.....[da
Chestnut-collared longspur								
Vesper sparrow	sr, res	ab, rare				fall	yes	Familiar. Common in Atlantic district during whole year
Ipswich sparrow								
Savanna sparrow	sr	c					yes	Quite common. Apr. to Oct. Breeds
Baird sparrow								
Grasshopper sparrow	sr	c					yes	Yellow-winged bunting. May to Oct. in large numbers. Bre
Henslow sparrow	sr	unc						Noticed in Rockland co. and L. I.
Leconte sparrow								
Sharp-tailed sparrow	sr	fc						Found only in salt marshes. Breeds
Nelson sparrow								
Acadian sharp-tailed sparrow								
Seaside sparrow	sr	ab						sr in our salt marshes. Breeds
Lark sparrow								
White-crowned sparrow	tv	rare	May 15					Rather rare. May & autumn
Gambel sparrow								
White-throated sparrow	tv	c			fall			More or less during whole year. Breeds (?)
Tree sparrow	wv	c		Apr				wv
Chipping sparrow	sr	ab	Mar., late			Oct	May, early	Familiar to all. Breeds
Field sparrow	sr	ab	Apr. 15				yes	Common. Arrives in Apr. Breeds
Slate-colored junco	wv	ab		Apr., late	Oct. 15			Resident. Breeds
Carolina junco								
Song sparrow	sr, wv	ab, rare					yes	With Bluebird the earliest harbinger of spring
Lincoln sparrow								Observed by William Cooper near New York
Swamp sparrow	sr						yes	sr. Breeds abundantly
Fox sparrow	tv	c			Oct., late			Migrant. Early spring, Oct. & Nov.
Towhee	sr	c	Apr., late			Oct. 15	yes	sr. Apr. to Nov. Breeds
Cardinal	sv	reg						sv in Atlantic district. Breeds?

RENCE, ETC. 1866	ROOSEVELT AND MINOT, FRANKLIN COUNTY, 1877	MEARNS, HUDSON HIGHLANDS, 1879–1890							
ccurs	Common or rare	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds
	shot in Aug.	res.						yes.
		res.	ab.					May 30.
	c in woods.	res.						yes.
		wv.	oc.			20 Jan. '77.		
		sr.	c.	May 6, 10, 14.			Sept. 23.	yes.
	heard twice.	sr.	ab.	Apr. 26, May 15, 20.			Sept. 16, 25.	May.
	seen.	sr.	c.	Mar. 18, Apr. 5, 22.			Nov. 4, 17, 30.	yes.
	very c.	res.	ab.					May 5.
	1 in June; c, Aug.	res.	ab.					May 1–14.
	c.							
	much less c.							
	fc.	tv, wv.	ab, rare.					
	rare.							
		tv, wv.	rare.					
		sr.	oc.					
	seen.	sr, wv.	ab, irreg.	Mar.			Nov. late.	June 1.
	1 in July.	sr.	c.	Apr. 22, May 10–12.			Sept. 30.	yes.
	seen.	sr.	c.	Apr. 14, 29, May 15.			Sept. 15, 24, Oct. 3.	yes.
	c.	sr.	ab.	Apr. 6, May 8–16.			Sept. 18, 24, 30.	May 21–30.
	rare.	sr.	c.	May 2, 7, 12.			Sept. 20, 24, 29.	yes.
	c.	sr.	c.	May 1, 7, 14.			Sept.	yes.
	very rare.	tv, sr.	c, ab.	May 3, 13, 23.			Sept. 19, 24.	yes.
	seen.	sr.	c.	Mar. 2, 15, 29.			Oct. 15, 20, 26.	Apr. 10, May 20.
	fc.	tv.	c.	May 9, 17.	May 25, 29.	Aug. 27, Sept. 5.	Sept. 15, 18.	
	seen.	sr.	c.	May 11, 15, 20.			Sept. 11, 16, 21.	
	rather rare.	tv.	c.	May 9, 14, 23.	May 28–31.		Sept. 28.	
	rare.	tv, sr.	fc, oc.	May 12, 13, 25.	May 28–31.			(?).
	strikingly c.	sr.	ab.	Apr. 26, May 2, 10.			Sept., Oct. 8.	yes.
			local, oc.					
	fc.	res, tv.	ab.					yes.
	c local.							
I.	1 pair, Aug. '74.							
	comparatively c.	res.						Apr. 14.
			oc.					
	seen in Aug.	sr, tv.	fc, ab.	May 5, 12, 23.			Sept. 10–22.	yes.
	rare.	sr.	c.	Mar. 30, Apr. 5, 18.			Aug.	yes.
	not ab.	sr.	c.	Mar. 6, 18, 31.			Nov. 17.	yes.
		res, tv.	oc, c.	Mar. 30, Apr. 5.				yes.
		sr.	c.	May 3, 7, 13.			Sept. 17.	yes.
		sr.	ab.	May 2, 6, 9.			Sept. 22.	yes.
	2 or 3 in June.	tv.	c.	Mar. 11, 17, 30.	May.	Sept.	Dec.	
		tv.		Feb. 29, Mar. 8. 12.			Nov.	(?).
	unc.							
		wv.	irreg, ab at times.			Nov. 22, Dec. 11.		
, 1860.		res.						yes.
	c.	res, wv.	ab.					yes.
	not rare.	wv.	oc, ab at times.			Dec. '74.		
		wv.	oc.			28 Dec. '74.		
		wv.	oc, ab at times.			Nov. 9.		
	c.	res.	c.					yes.
	1, 27 Aug. '74.	wv.	oc, ab at times.			16 Oct. '74.		
		wv.	irreg.		Mar.	Nov. 8.		
	c.	sr.		Mar. 30.			Nov.	yes.
	rare.	tv, sr.	c, unc.					
		sr.	rare.					yes.
		tv.				Oct. 12, 16.		
		tv.	rather rare.	May 12, 18.	May 23.	Oct. 12.	Oct. 16.	
	c.	tv.	very ab.	Apr. 2, 14, 30.	May 16, 23, 30.			
		wv.	very ab.		Mar. 28, Apr. 13, 29.	Oct. 26, 31, Nov. 7.		
	seen.	sr.	very ab.	Apr. 2, 7, 16.			Oct. 23, 29, Nov. 29.	May 12–17.
	(?).	sr.	ab.	Apr. 17, 21, 28.				May 16.
	c.	wv.	ab.		Apr. 22, May 1, 9.	Sept. 28, Oct. 12, 18.		
	c.	res.	ab.					Apr. 22, Aug.
	2 or 3.	sr, wv.	oc.	Mar.			Dec.	yes.
		tv.	ab.	Feb. 28, Mar. 12, 23.	Apr. 2, 14, 30.	Oct. 22, 28.	Nov. 25, Dec. 8.	
		sr.	ab.	Apr. 25, 30, May 5.			Oct. 11–15.	
I.			once, 17 May, '76.					

SPECIES RECORDED	GIRAUD, LONG ISLAND, 1844							DE KAY, NEW YORK STATE, 1844	LAWRENCE, N. Y., ETC. 1866	ROOSEVELT AND MINOT, FRANKLIN COUNTY, 1877	MEARNS, HUDSON HIGHLANDS, 1879–1890						
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Occurs	Common or rare	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds
Barred owl		occurs						Common	x	shot in Aug.	res						yes
Great gray owl								Will doubtless be found within State									
Richardson owl								Called Littleowl or Saw-whet in this State	x		res	ab					May 30
Saw-whet owl		rare						Exclusively belonging to the Union	x	c in woods	res						yes
Screech owl		ab					yes	Throughout the continent	x		wv	oc			20 Jan. '77		
Great horned owl		unc						Not an uncommon visitor in severe winters	x								
Snowy owl	wv	unc						Rare visitor except in more northern counties. Breeds?	rare								
American hawk owl																	
Burrowing owl								In 1795 middle of winter, large flock near Albany			sr	c	May 6, 10, 14			Sept. 23	yes
Carolina paroquet							June	Not very common, May to autumn in every part of State. Breeds	x	heard twice	sr	ab	Apr. 26, May 15, 20			Sept. 16, 25	May
Yellow-billed cuckoo	sr	c	May 15					May to autumn. Breeds	x	seen	sr	c	Mar. 18, Apr. 5, 22			Nov. 4, 17, 30	yes
Black-billed cuckoo	sr	c				fall	yes	Resident nearly the whole year. Breeds	x	very c	res	ab					May 5
Belted kingfisher	sr	fc					yes	Constant resident	x	1 in June; c, Aug.	res	ab					May 1–14
Hairy woodpecker	res						yes	Resident	x	c							
Downy woodpecker	res							Rare in Atlantic district. Numerous in Hamilton & Herkimer co.		much less c							
Arctic three-toed woodpecker								Banded woodpecker. Northern part of State	x	fc	tv, wv	ab, rare					
Am. three-toed woodpecker								sr. Breeds	x	rare							
Yellow-bellied sapsucker		unc						Particularly abundant in uncleared forests. Almost unknown in	x		tv, wv	rare					
North. pileated woodpecker								May to Sept. Breeds. Sometimes winters....[Atlantic district	x		sr	oc					
Red-headed woodpecker	sr, wv	fc, oc	Apr. early			fall, late	May 1	Not very abundant. Summer resident. Breeds	x	seen	sr, wv	ab, irreg	Mar.			Nov. late	June 1
Red-bellied woodpecker		fc						sr. A few remain during year	x	1 in July	sr	c	Apr. 22, May 10–12			Sept. 30	yes
Northern flicker	tv, wv	rare					May, late	Arrives end of Apr. Breeds	x	seen	sr	c	Apr. 14, 20, May 15			Sept. 15, 24, Oct. 3	yes
Whip-poor-will	sr	c	May 1			Aug. late	May, late	Appears at same time with Whip-poor-will	x	c	sr	ab	Apr. 6, May 8–16			Sept. 18, 24, 30	May 21–30
Nighthawk	sr		May, early				2 broods	Appears latter end of Apr. Breeds	x	rare	sr	c	May 2, 7, 12			Sept. 20, 24, 29	yes
Chimney swift	sr		May, early					May to Oct. Breeds. Warm season in great numbers	x	c	sr	c	May 1, 7, 14			Sept	yes
Ruby-throated hummingbird	sr	c	May 1			Sept. late	May, late	Last of Apr. to Sept. or Oct. Common. Breeds in every part of	x								
Kingbird	sr		May				yes										
Gray kingbird																Sept. 19, 24	yes
Arkansas kingbird								Rare in our State	x	very rare	tv, sr	c, ab	May 3, 13, 23			Oct. 15, 20, 26	Apr. 10, May 20
Crested flycatcher	sr	c	May 15			Sept. late; Oct. early		Last of Mar. to Oct. or Nov. Breeds in every part of State	x	seen	sr	c	Mar. 2, 15, 29			Sept. 15, 18	
Phoebe	sr		Mar. early			fall, late	2 broods	Doubtless breeds in State, but have never met with a specimen here	x	fc	tv	c	May 9, 17	May 25, 29	Aug. 27, Sept. 5	Sept. 11, 16, 21	
Olive-sided flycatcher								Appears middle of May. Breeds	x	seen	sr	c	May 11, 15, 20			Sept. 28	
Wood pewee	sr		May, late					One specimen from L. I.	x	rather rare	tv	c	May 9, 14, 23	May 28–31			
Yellow-bellied flycatcher								Appears early in May. Breeds	x								(?)
Green-crested flycatcher	sr		May, late			Sept. early				rare	tv, sr	fc, oc	May 12, 13, 25	May 28–31		Sept., Oct. 8	yes
Alder flycatcher								Confused with Green-crested	x	strikingly c	sr	ab	Apr. 26, May 2, 10				
Least flycatcher		unc															
Skylark								Winter visitor. Numerous at times	x			local, oc					
Horned lark	wv			Mar., late	Oct., late												
Hoyt horned lark																	
Prairie horned lark									x	fc	res, tv	ab					yes
Blue jay	res	ab, spring					yes	Common resident. Breeds	once	c local							
Canada jay								Rare, except in northern districts. Breeds	rare L. I.	1 pair, Aug. '74							Apr. 14
Northern raven		oc						Rare, except in northern districts, common. Breeds	x	comparatively c	res						
American crow	tv, res	ab, c					yes	Constant resident. Less numerous in northern and western dist's	N. J.			oc					
Fish crow								Occasionally seen on shores of L. I.								Sept. 10–22	yes
Starling									x	seen in Aug.	sr, tv	fc, ab	May 5, 12, 23			Aug.	yes
Bobolink	sr	ab	May, late				yes	First week in May to Oct. Breeds	x	rare	sr	c	Mar. 30, Apr. 5, 18				
Cowbird	tv	ab	Apr., early		Sept., late			Apr. to Oct.								Nov. 17	yes
Yellow-headed blackbird									x	not ab	sr	c	Mar. 6, 18, 31				yes
Red-winged blackbird	sr	ab	Apr. 1				May, early	Mar. to Nov. Well known in every part of State	x		res, tv	oc, c	Mar. 30, Apr. 5			Sept. 17	yes
Meadowlark	res	c					yes	Well known in all parts of State. Breeds. Sometimes winters	x		sr	c	May 3, 7, 13			Sept. 22	yes
Orchard oriole	sr	c	May			Sept	yes	More common than Baltimore in southern part of State. Breeds	x		sr	ab	May 2, 6, 9				
Baltimore oriole	sr	fc						sr. Breeds								Dec.	
Bullock oriole																Nov.	(?)
Rusty blackbird	tv	fc	Apr., early			Sept., late		Apr. to Nov. Sometimes Jan. Breeds in Adirondacks	x	2 or 3 in June	tv	c	Mar. 11, 17, 30	May	Sept		
Purple grackle	sr	c	Apr. 1			fall, late	yes	sr. Breeds. Apr. to autumn	x		tv		Feb. 29, Mar. 8, 12				
Bronzed grackle								Included with preceding	rare	unc							
Evening grosbeak									x		wv	irreg, ab at times			Nov. 22, Dec. 11		
Pine grosbeak	wv	c, 1827, '43						Visits sparingly Atlantic district. Probably breeds in northern dis-	set free, 1860		res						yes
House sparrow																	
Chaffinch																	yes
Greenfinch									x	c	res, wv	ab			Dec. '74		
Purple finch	sv, wv	oc, ab		May 15	fall			In Atlantic district May, Nov., Jan. Breeds in northern district	x	not rare	wv	oc, ab at times			28 Dec. '74		
American crossbill	wv	unc						May be considered as breeding in State.....[Doubtless breeds	x		wv	oc					
White-winged crossbill	wv	rare						Common along Lake Ontario. Rare in [southern part of State	x						Nov. 9		
Hoary redpoll								Mealy redpoll. Have never met with it in this State	x		wv	oc, ab at times					
Redpoll	wv							wv									
Holboell redpoll																	yes
Greater redpoll																	
European linnet									x	c	res	c			16 Oct. '74		
American goldfinch	res						yes	Well known. Found at all seasons. Breeds	x	1, 27 Aug. '74	wv	oc, ab at times					
Pine siskin	tv	ab, irreg			fall			Observed from Oct. to Mar.						Mar.	Nov. 8		
European goldfinch									x		wv	irreg					
Snowflake	wv				Dec., early			In Atlantic district after severe snowstorms. May breed in Adiron-	x							Nov.	yes
Lapland longspur	av							Occasional wv. Winter 1838 numbers shot on L. I.....[dacks	x				Mar. 30				
Chestnut-collared longspur									x	c	sr						
Vesper sparrow	sr, res	ab, rare				fall	yes	Familiar. Common in Atlantic district during whole year	x	rare	tv, sr	c, unc					yes
Ipswich sparrow																	
Savanna sparrow	sr	c					yes	Quite common. Apr. to Oct. Breeds	x		sr	rare					
Baird sparrow									x								
Grasshopper sparrow	sr	c					yes	Yellow-winged bunting. May to Oct. in large numbers. Breeds	x								
Henslow sparrow	sr	unc						Noticed in Rockland co. and L. I.							Oct. 12, 16		
Leconte sparrow									x		tv						
Sharp-tailed sparrow	sr	fc						Found only in salt marshes. Breeds									
Nelson sparrow									x								
Acadian sharp-tailed sparrow															Oct. 12	Oct. 16	
Seaside sparrow	sr	ab						sr in our salt marshes. Breeds	x								
Lark sparrow											tv	rather rare	May 12, 18	May 23			
White-crowned sparrow	tv	rare	May 15					Rather rare. May & autumn	x								
Gambel sparrow									x	c	tv	very ab	Apr. 2, 14, 30	May 16, 23, 30	Oct. 26, 31, Nov. 7		
White-throated sparrow	tv	c			fall			More or less during whole year. Breeds (?)	x		wv	very ab		Mar. 28, Apr. 23, 29		Oct. 23, 29, Nov. 29	May 12–17
Tree sparrow	wv	c		Apr.				wv	x	seen	sr	very ab	Apr. 2, 7, 16				May 16
Chipping sparrow	sr	ab	Mar., late			Oct.	May, early	Familiar to all. Breeds	x	(?)	sr	ab	Apr. 17, 21, 28	Apr. 22, May 1, 9	Sept. 28, Oct. 12, 18		
Field sparrow	sr	ab	Apr. 15				yes	Common. Arrives in Apr. Breeds	x	c	wv	ab					Apr. 22, Aug.
Slate-colored junco	wv	ab		Apr., late	Oct. 15			Resident. Breeds	x			ab					
Carolina junco									x	c	res	ab				Dec.	yes
Song sparrow	sr, wv	ab, rare					yes	With Bluebird the earliest harbinger of spring	x				Mar.			Nov. 25, Dec. 8	
Lincoln sparrow								Observed by William Cooper near New York	x	2 or 3	sr, wv	oc	Feb. 28, Mar. 12, 23	Apr. 2, 14, 30	Oct. 22, 28	Oct. 11–15	
Swamp sparrow	sr						yes	sr. Breeds abundantly	x		tv	ab	Apr. 25, 30, May 5				
Fox sparrow	tv	c			Oct., late			Migrant. Early spring, Oct. & Nov.	x		sr	ab					
Towhee	sr	c	Apr., late			Oct. 15	yes	sr. Apr. to Nov. Breeds	once L. I.			once, 17 May, '76					
Cardinal	sv	reg						sv in Atlantic district. Breeds?									

SPECIES RECORDED	RATHBUN, CENTRAL NEW YORK, 1879						MERRIAM, ADIRONDACK REGION, 1881–1884		
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Departs for south	Breeds	Resident or transient	Common or rare	Breeds
Barred owl	res	c				yes	res	c	yes
Great gray owl								rare, 10 Apr. '73	
Richardson owl									
Saw-whet owl		rare					res	fc	
Screech owl	res	c				yes		not rare	yes
Great horned owl	res	c				yes	res	c	
Snowy owl	wv	irreg, winter '76					wv	irreg	
American hawk owl								rare	
Burrowing owl									
Carolina paroquet									
Yellow-billed cuckoo	sr	fc	May 7		Sept	yes		rare	yes
Black-billed cuckoo	sr	fc	May 7		Sept. 30	yes		rather rare	local
Belted kingfisher	sr	fc	Apr. 6, 13		Nov	yes	sr	c	yes
Hairy woodpecker	res	c				yes	res	c	yes
Downy woodpecker	res	c				yes	res	fc	yes
Arctic three-toed woodpecker							res	fc	
Am. three-toed woodpecker							res	less c	
Yellow-bellied sapsucker	tv	c	Apr. 9		Oct		sr	c	yes
North. pileated woodpecker							res	fc	
Red-headed woodpecker	sr, wv	ab, oc						unc	local
Red-bellied woodpecker	res	fc							
Northern flicker	sr, wv	ab, oc	Apr. 6, 12		Oct. 30	yes		rare	
Whip-poor-will	sr	rare						unc	yes
Nighthawk	sr	c				yes		rather rare	local
Chimney swift	sr	ab	Apr. 20		Oct. 14	yes	sr	c	
Ruby-throated hummingbird	sr	c	May 5		Sept	yes	sr	fc	
Kingbird	sr	c	May 5, 14		Sept. 20	yes		c	yes
Gray kingbird									
Arkansas kingbird									
Crested flycatcher	sr	c	Apr. 27, May 6		Sept	yes		rather rare	yes
Phoebe	sr	c	Mar. 30		Oct. 10	yes		rather rare	yes
Olive-sided flycatcher		rare					sr	c	June 15
Wood pewee	sr	c	May 10				sr	fc	
Yellow-bellied flycatcher							sr	rather rare	
Green-crested flycatcher	sr		23 May '76			yes			
Alder flycatcher		fc					sr	unc	
Least flycatcher	sr	c	Apr. 30		Sept. 20	yes	sr	c	yes
Skylark									
Horned lark									
Hoyt horned lark									
Prairie horned lark	res	c, spring, fall						rare	local
Blue jay	res	unc				yes	res	ab	
Canada jay							res, wv	fc, very ab	very early
Northern raven		rare					res	c	
American crow	res	c				yes	sr, res	c, oc	
Fish crow									
Starling									
Bobolink	sr	c	May 5		Aug	yes	sr		local
Cowbird	sr, wv	ab, oc						not rare	
Yellow-headed blackbird									
Red-winged blackbird	sr	ab	Mar. 15		Nov	yes		fc	yes
Meadowlark	sr, wv	ab, oc				yes		rare	
Orchard oriole	sr	unc							
Baltimore oriole	sr	c	May 3		Sept	yes		local	
Bullock oriole									
Rusty blackbird	tv	c	Apr		Oct		sr	c	
Purple grackle								unc	yes
Bronzed grackle	sr, wv	c, oc				yes		c	yes
Evening grosbeak									
Pine grosbeak	wv	irreg					wv	fc	
House sparrow	res	ab						c, in villages	
Chaffinch									
Greenfinch									
Purple finch	sr	ab	Mar. 9, Apr		Oct	yes	res, sr	oc, c	
American crossbill	wv	irreg		Apr., May			res	ab	Feb., Mar.
White-winged crossbill	wv	irreg			24 Dec. '78		res	unc	
Hoary redpoll									
Redpoll	wv	irreg; c, '78					wv	irreg	
Holboell redpoll									
Greater redpoll									
European linnet									
American goldfinch	res	ab				yes	sr	c	July
Pine siskin	wv	irreg						irreg	sometimes ab.
European goldfinch									
Snowflake	wv	c		Mar	Oct. 20, Nov		wv	c	
Lapland longspur	wv	unc					wv	unc	
Chestnut-collared longspur									
Vesper sparrow	sr	ab	Apr. 5		Oct. 30	yes		c	yes
Ipswich sparrow									
Savanna sparrow	sr	c	Apr		Oct	yes	sr	rather rare	yes
Baird sparrow									
Grasshopper sparrow		unc							
Henslow sparrow									
Leconte sparrow									
Sharp-tailed sparrow									
Nelson sparrow									
Acadian sharp-tailed sparrow									
Seaside sparrow									
Lark sparrow									
White-crowned sparrow	tv	c	May 1				tv		
Gambel sparrow									
White-throated sparrow	tv	ab	Apr. 15		Oct. 20		sr	ab	
Tree sparrow	wv	c	Apr. 30				tv	c	
Chipping sparrow	sr	c	Apr. 15		Oct. 10	yes		unc	yes
Field sparrow	sr	c	Apr. 4		Oct. 20	yes		local	
Slate-colored junco	tv, wv	c, oc						c	June, early
Carolina junco									
Song sparrow	sr	ab	Mar. 1		Nov	yes	sr	fc	yes
Lincoln sparrow							sr	not very rare	
Swamp sparrow	sr	c	Apr		Oct. 30	yes		rather rare	yes
Fox sparrow	tv	c	Apr. 5, Mar. 9					twice, 12 Oct. '79	
Towhee	sr	fc						rare, local	
Cardinal									

BICKNELL, CATSKILLS, 1882			LANGILLE, OUR BIRDS IN THEIR HAUNTS, 1884						
ident r ient	Common or rare	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds
	c		res	rare					
			res	unc					
			res	ab					
			res	ab					Feb. 15
			wv	oc		7 May '77			
			wv	oc					
			sr						yes
			sr	ab					
	fc		sr	c	Mar. 18				
	unc		res						
	fc	June 1	tv		Apr. 15	May			
				now rare, once ab					near Buffalo, 1882
			sr, res	c, oc					
	fc		res	unc					
	fc, outskirts		sr		Mar., late				
	fc		sr	local					
	ab		sr	local	May, early			fall, early	
	fc		sr	c	Apr. 30, May 5			Oct., early	
	valleys		sr		May 5			Sept	
	outskirts		sr	c	May 5				
	c	yes	sr		Mar. 25–Apr. 5				
	fc, upper valleys	yes							
	c, valleys	yes	sr						June
	fc, 3500 feet	June 26			May, late				(?)
			(?)						
	c, higher valleys		(?)						
	fc		sr	c					May 25, June 10
	near Esopus								
					Jan			Nov	Mar., Apr., 2 broods
	fc		res						
	once			ab, formerly					
			res	ab					
	c, valleys		sr		May			Aug	
	unc, valleys		sr		Apr. 5				
	valleys		sr		Mar. 7				May 10
	valleys		sr, res	c, oc	Mar. 10				May 15
	outskirts								
	villages		sr	c					
					1 May '80		Sept. 25	Nov. 1	
			sr	c	Mar				May 5
			wv	oc					
			res	c					
	c	yes	sr		Mar				May 15–June 10
			wv	oc					
			wv	oc					
			wv	c, at times					
	c		sr, res	ab, oc.					
			wv	oc					
			wv	c					
			wv	oc					
	ab	June 8	sr	c	Apr. 7				May 5
	2500 ft		sr	ab	Apr. 15			Nov. 1	May, June, 2 broods
			sr	local, unc	May			Sept	June 5
			tv	c	Apr. 30–May 10				
	oc		tv	c	Apr. 25	May 15	Sept	Oct	
			wv	ab		May 1	Oct		
	c, about cultivation		sr	ab	May 5				
	unc, 2000 ft		sr		Apr. 15				May 20–June 10
	ab	May 30	wv	c		May	Oct		
	c		sr	ab	Mar. 1				2 or 3 broods
			tv		17 May '80				
	outskirts		sr		Apr. 22				May 25
	unc				Apr				
			av						

SPECIES RECORDED	RATHBUN, CENTRAL NEW YORK, 1879						MERRIAM, ADIRONDACK REGION, 1881–1884			BICKNELL, CATSKILLS, 1882			LANGILLE, OUR BIRDS IN THEIR HAUNTS, 1884						
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Departs for south	Breeds	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds
Barred owl	res	c				yes	res	c	yes	res	c		res	rare					
Great gray owl								rare, 10 Apr. '73											
Richardson owl																			
Saw-whet owl		rare					res	fc					res	unc					
Screech owl	res	c				yes		not rare	yes	res			res	ab					
Great horned owl	res	c				yes	res	c		res			res	ab					Feb. 15
Snowy owl	wv	irreg, winter '76					wv	irreg					wv	oc		7 May '77			
American hawk owl								rare					wv	oc					
Burrowing owl																			
Carolina paroquet																			
Yellow-billed cuckoo	sr	fc	May 7		Sept	yes		rare	yes	(?)			sr						yes
Black-billed cuckoo	sr	fc	May 7		Sept. 30	yes		rather rare	local	sr			sr	ab					
Belted kingfisher	sr	fc	Apr. 6, 13		Nov	yes	sr	c	yes	sr			sr	c	Mar. 18				
Hairy woodpecker	res	c				yes	res	c	yes	res	fc		res						
Downy woodpecker	res	c				yes	res	fc	yes	res	unc		res						
Arctic three-toed woodpecker							res	fc											
Am. three-toed woodpecker							res	less c											
Yellow-bellied sapsucker	tv	c	Apr. 9		Oct		sr	c	yes	sr	fc	June 1	tv		Apr. 15	May			
North. pileated woodpecker							res	fc		res				now rare, once ab					near Buffalo, 1882
Red-headed woodpecker	sr, wv	ab, oc						unc	local	sr			sr, res	c, oc					
Red-bellied woodpecker	res	fc											res	unc					
Northern flicker	sr, wv	ab, oc	Apr. 6, 12		Oct. 30	yes		rare		sr	fc		sr		Mar., late				
Whip-poor-will	sr	rare						unc	yes	sr	fc, outskirts		sr	local					
Nighthawk	sr	c				yes		rather rare	local	sr	fc		sr	local	May, early			fall, early	
Chimney swift	sr	ab	Apr. 20		Oct. 14	yes	sr	c		sr	ab		sr	c	Apr. 30, May 5			Oct., early	
Ruby-throated hummingbird	sr	c	May 5		Sept	yes	sr	fc		sr	fc		sr						
Kingbird	sr	c	May 5, 14		Sept. 20	yes		c	yes	sr	valleys		sr		May 5			Sept	
Gray kingbird																			
Arkansas kingbird																			
Crested flycatcher	sr	c	Apr. 27, May 6		Sept	yes		rather rare	yes	sr	outskirts		sr	c	May 5				
Phoebe	sr	c	Mar. 30		Oct. 10	yes		rather rare	yes	sr	c	yes	sr		Mar. 25–Apr. 5				
Olive-sided flycatcher		rare					sr	c	June 15	sr	fc, upper valleys	yes							
Wood pewee	sr	c	May 10				sr	fc		sr	c, valleys	yes	sr						June
Yellow-bellied flycatcher							sr	rather rare		sr	fc, 3500 feet	June 26			May, late				(?)
Green-crested flycatcher	sr		23 May '76			yes							(?)						
Alder flycatcher		fc					sr	unc		sr	c, higher valleys		(?)						
Least flycatcher	sr	c	Apr. 30		Sept. 20	yes	sr	c	yes	sr	fc		sr	c					May 25, June 10
Skylark											near Esopus								
Horned lark																			
Hoyt horned lark																			
Prairie horned lark	res	c, spring, fall						rare	local						Jan			Nov	Mar., Apr., 2 broods
Blue jay	res	unc				yes	res	ab		res	fc		res						
Canada jay							res, wv	fc, very ab	very early										
Northern raven		rare					res	c			once			ab, formerly					
American crow	res	c				yes	sr, res	c, oc		sr			res	ab					
Fish crow																			
Starling																			
Bobolink	sr	c	May 5		Aug	yes	sr		local	sr	c, valleys		sr		May			Aug	
Cowbird	sr, wv	ab, oc						not rare		sr	unc, valleys		sr		Apr. 5				
Yellow-headed blackbird																			May 10
Red-winged blackbird	sr	ab	Mar. 15		Nov	yes		fc	yes	sr	valleys				Mar. 7				May 15
Meadowlark	sr, wv	ab, oc				yes		rare		sr	valleys		sr		Mar. 10				
Orchard oriole	sr	unc								sr	outskirts								
Baltimore oriole	sr	c	May 3		Sept	yes		local		sr	villages		sr	c					
Bullock oriole																			
Rusty blackbird	tv	c	Apr		Oct		sr	c							1 May '80		Sept. 25	Nov. 1	
Purple grackle								unc	yes										May 5
Bronzed grackle	sr, wv	c, oc				yes		c	yes				sr	c	Mar				
Evening grosbeak																			
Pine grosbeak	wv	irreg					wv	fc					wv	oc					
House sparrow	res	ab						c, in villages		res			res	c					
Chaffinch																			
Greenfinch																			May 15–June 10
Purple finch	sr	ab	Mar. 9, Apr		Oct	yes	res, sr	oc, c		sr	c	yes	sr		Mar				
American crossbill	wv	irreg		Apr., May			res	ab	Feb., Mar	sr			wv	oc					
White-winged crossbill	wv	irreg			24 Dec. '78		res	unc					wv	oc					
Hoary redpoll																			
Redpoll	wv	irreg; c, '78					wv	irreg					wv	c, at times					
Holboell redpoll																			
Greater redpoll																			
European linnet																			
American goldfinch	res	ab				yes	sr	c	July	sr	c		sr, res	ab, oc					
Pine siskin	wv	irreg						irreg	sometimes ab				wv	oc					
European goldfinch																			
Snowflake	wv	c		Mar	Oct. 20, Nov		wv	c					wv	c					
Lapland longspur	wv	unc					wv	unc					wv	oc					
Chestnut-collared longspur																			May 5
Vesper sparrow	sr	ab	Apr. 5		Oct. 30	yes		c	yes	sr	ab	June 8	sr	c	Apr. 7			Nov. 1	May, June, 2 broods
Ipswich sparrow										sr	2500 ft				Apr. 15				
Savanna sparrow	sr	c	Apr		Oct	yes	sr	rather rare	yes				sr	ab				Sept	June 5
Baird sparrow																			
Grasshopper sparrow		unc											sr	local, unc	May				
Henslow sparrow																			
Lecoute sparrow																			
Sharp-tailed sparrow																			
Nelson sparrow																			
Acadian sharp-tailed sparrow																			
Seaside sparrow																			
Lark sparrow																			
White-crowned sparrow	tv	c	May 1												Apr. 30–May 10				
Gambel sparrow							tv						tv	c		May 15	Sept	Oct	
White-throated sparrow	tv	ab	Apr. 15		Oct. 20		sr	ab		sr	oc			c	Apr. 25	May 1	Oct		
Tree sparrow	wv	c	Apr. 30				tv	c					tv	ab					
Chipping sparrow	sr	c	Apr. 15		Oct. 10	yes		unc	yes	sr	c, about cultivation		wv		May 5				May 20–June 10
Field sparrow	sr	c	Apr. 4		Oct. 20	yes		local		sr	unc, 2000 ft		sr	ab	Apr. 15	May	Oct		
Slate-colored junco	tv, wv	c, oc						c	June, early	res	ab	May 30	sr						2 or 3 broods
Carolina junco													wv	c					
Song sparrow	sr	ab	Mar. 1		Nov	yes	sr	fc	yes	sr	c		sr	ab	Mar. 1				May 25
Lincoln sparrow							sr	not very rare		sr			tv		17 May '80				
Swamp sparrow	sr	c	Apr		Oct. 30	yes		rather rare	yes	sr	outskirts		sr		Apr. 22				
Fox sparrow	tv	c	Apr. 5, Mar. 9					twice, 12 Oct. '79		sr					Apr				
Towhee	sr	fc						rare, local			unc								
Cardinal													av						

SPECIES RECORDED	EDSON, CHAUTAUQUA COUNTY, 1886					BARNUM, ONONDAGA COUNTY, 1886			
	Resident or transient	Common or rare	Arrives from south	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	B
Barred owl		unc				res	c		yes
Great gray owl									
Richardson owl									
Saw-whet owl						res	fc		
Screech owl		fc				res	c		yes
Great horned owl		unc				res	c		yes
Snowy owl	wv	oc				wv	fc		
American hawk owl							2 records		
Burrowing owl									
Carolina paroquet									
Yellow-billed cuckoo						sr	c		yes
Black-billed cuckoo	sr	c	May 15			sr	ab		yes
Belted kingfisher	sr, wv	c, oc				sr	ab	Mar. 22	yes
Hairy woodpecker	res	fc				sr	c		yes
Downy woodpecker	res	c				res	ab		yes
Arctic three-toed woodpecker	wv	once, 29 Dec. '84				wv	rare, 25 Dec. '83		
Am. three-toed woodpecker									
Yellow-bellied sapsucker	tv		Apr.	Oct		tv	c	Mar. 28	
North. pileated woodpecker	tv, sr	spring, oc		fall			once, 11 May '83		
Red-headed woodpecker	res	c				sr	c		yes
Red-bellied woodpecker	tv	unc							
Northern flicker	sr	ab	Apr. 3			sr	ab	Mar. 22	yes
Whip-poor-will		rare				tv	rare		
Nighthawk	sr	fc	May			sr	ab		yes
Chimney swift	sr	c	Apr. 27	Oct	yes	sr	ab	May 2	yes
Ruby-throated hummingbird	sr	c	May 11			sr	c		yes
Kingbird	sr	c	May 1			sr	ab	May 3	yes
Gray kingbird									
Arkansas kingbird									
Crested flycatcher	sr	unc				sr	c		yes
Phoebe	sr	c	Apr. 3			sr	ab	Mar. 25	yes
Olive-sided flycatcher									
Wood pewee	sr	c	Apr.			sr	ab		yes
Yellow-bellied flycatcher									
Green-crested flycatcher		rare							
Alder flycatcher									
Least flycatcher	sr	c	May 1			sr	c		yes
Skylark									
Horned lark	res	oc					with following		
Hoyt horned lark									
Prairie horned lark						tv	ab	Feb. 22	
Blue jay	res, local					res	c		
Canada jay									
Northern raven									
American crow	sr, wr	c, oc				res	ab		yes
Fish crow									
Starling									
Bobolink	sr	c	May 3			sr	ab	May 13	yes
Cowbird	sr	fc			yes	sr	ab	Mar. 26	yes
Yellow-headed blackbird									
Red-winged blackbird	sr	c	Mar. 15			sr	ab	Mar. 22	yes
Meadowlark	sr, wv	c, oc				sr	ab	Mar. 22	yes
Orchard oriole		rare							
Baltimore oriole	sr	c	May			sr	ab		yes
Bullock oriole									
Rusty blackbird	tv		Apr. 1			tv	c		
Purple grackle	sr	c	Mar.						
Bronzed grackle						sr	ab	Mar. 18	yes
Evening grosbeak									
Pine grosbeak						wv	fc	Mar. 15	
House sparrow	res	ab							
Chaffinch									
Greenfinch									
Purple finch	sr	c	Mar.			sr	c	Mar. 18	yes
American crossbill						wv	c		
White-winged crossbill						wv	fc		
Hoary redpoll									
Redpoll						wv	ab	Feb. 23	
Holboell redpoll									
Greater redpoll									
European linnet									
American goldfinch	sr	unc	Apr.		yes	res	ab	Feb. 23	yes
Pine siskin						wv	c	Feb. 22	
European goldfinch									
Snowflake	wv	unc				wv	ab	Mar. 1	
Lapland longspur						wv	fc		
Chestnut-collared longspur									
Vesper sparrow		c	Apr. 1			sr	ab	Mar. 28	yes
Ipswich sparrow									
Savanna sparrow		fc				sr	c	Mar. 29	yes
Baird sparrow									
Grasshopper sparrow									
Henslow sparrow									
Leconte sparrow									
Sharp-tailed sparrow									
Nelson sparrow									
Acadian sharp-tailed sparrow									
Seaside sparrow									
Lark sparrow									
White-crowned sparrow	tv	c	May 1	Oct		tv	fc	May 4	
Gambel sparrow									
White-throated sparrow	tv					tv	c	Mar. 22 (!)	
Tree sparrow	wv	c				wv	ab		
Chipping sparrow	sr	c	Apr.			sr	ab	Apr. 14	yes
Field sparrow	sr	c	May			sr	c	Apr. 19	yes
Slate-colored junco	sr					tv	ab	Mar. 15	yes t
Carolina junco									
Song sparrow	sr	c	Mar. 15			sr	ab	Mar. 15	yes
Lincoln sparrow						tv	rare	May 10	
Swamp sparrow						sr	ab	Apr. 19	yes
Fox sparrow	tv	rare				tv	c	Apr. 5	
Towhee	sr	c	May 11			sr	c	May 3	yes
Cardinal						av	rare	9 May '84	

I AND BAGG, ONEIDA COUNTY, 1886–1900			DAVISON, NIAGARA COUNTY, 1889			BERGTOLD, BUFFALO AND VICINITY			GREGG, CHEMUNG COUNTY, 1891		
sident or nsient	Common or rare	Breeds	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Arrives from south
	fc	Apr. 18		unc		res	rare	yes		c	
ler	twice, Feb. '75										
	fc, local	Apr. 5, 30		unc	yes		oc	yes	breeds	c	
	fc	yes		c	yes	res	fc	yes		c	
	fc	yes		c	yes	res	oc	yes		c	
	fc			c		wv	oc	yes	wv	rare	
	once, 1885										
		yes		c	yes		c	yes		c	
	c	yes		c	yes		fc	yes		c	
	c	yes		c	yes		c	yes		c	
	fc	yes		unc	yes	res	c	yes	res		
	c	yes		c	yes	res	c	yes	res	c	
l. mts	c										
l. mts	fc										
	c	yes		unc	yes	tv	c	yes		rare, twice	
	rather rare					av	twice				
	oc	yes		c	yes	res	c	yes			
ler	rare		tv	c			rare			unc	
	ab	yes		c	yes		ab	yes		ab	
	c, local			rare			oc	yes		ab	
	c			c	yes		c	yes		ab	
	c	yes		c	yes		ab	yes		ab	
	c	yes		c	yes		fc	yes	sr	ab	
	c	yes		c	yes		c	yes		ab	
	c	yes		c	yes		fc	yes		c	
	c	yes		c	yes		c	yes	breeds	ab	
						av	once			twice	
	c	yes		c	yes		c	yes		c	
	unc	yes, June					rare	yes			
				rare	yes					c	
	fc	yes	tv	rare							
	c	yes		c	yes		fc	yes		c	
			wv	rare							
	c, spring	yes		c	yes	res	c	yes			
	c	yes		unc	yes	res	c	yes			
	c, Ad. mts										
	c, Ad. mts										
	c	yes		c	yes	res	ab	yes	res		
	ab	yes		c	yes		c	yes		ab	May 1
	ab	yes		c	yes		c	yes	res		
	ab	yes		c	yes		ab	yes			
	c	yes		c	yes		c	yes	sr		
	once, 15 May '87			rare	yes		fc	yes			
	ab	yes		c	yes		c	yes	sr	c	
	several	May 7, 20, Ad. mts	tv	c		tv	c		sr	c	
							c	yes	sr	ab	
	ab	yes		c	yes						
	ac, 9 Feb. '90		wv	rare, Feb. '90			pair				
	unc		wv	rare		wv	rare				
	ab	yes									
	c, oc	yes		c	yes		fc	yes	res		
	oc, c, Ad. mts			rare		tv	fc	yes (?)	wv, breeds?	unc	
	unc					wv	rare				
	rare		wv	unc		wv	c		wv	c	
	Lewis co., once										
	ab, oc	yes		c	yes	res	ab	yes	res	c	
	oc	Ad. mts	wv	rare		wv	oc				
	c		wv	c		wv	c		wv	unc	
						wv	rare				
	ab	yes		c	yes		c	yes	sr	c	
	fc	yes		c	yes		oc	yes	tv	c	
l	c			unc	yes				res		
	once Utica, 12 O. '83										
	fc		tv	c		tv	c		sr	c	
	c, oc	yes	tv	c		tv	c			fc	
	ab		wr	c		wv	c		wr	c	
	ab	yes		c	yes		ab	yes		c	
		yes		c	yes		c	yes	sr	c	
	ab, c	yes	wr	c		res	c	yes	res	c	
	ab	yes		c	yes		ab	yes	sr	ab	
	rather rare, Ad. mts	yes				tv	rare				
	fc	yes		unc	yes		oc	yes	sr	c	
	unc		tv	c		tv	fc		tv		
	oc, local			unc	yes		fc	yes	sr	c	
				once, 10 May '83		av					

SPECIES RECORDED	EDSON, CHAUTAUQUA COUNTY, 1886					BARNUM, ONONDAGA COUNTY, 1886				RALPH AND BAGG, ONEIDA COUNTY, 1886–1900			DAVISON, NIAGARA COUNTY, 1889			BERGTOLD, BUFFALO AND VICINITY			GREGG, CHEMUNG COUNTY, 1891		
	Resident or transient	Common or rare	Arrives from south	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Breeds	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Arrives from south
Barred owl		unc.				res.	c.		yes	res.	fc.	Apr. 18		unc.		res.	rare.	yes.		c.	
Great gray owl										straggler	twice, Feb. '75										
Richardson owl																					
Saw-whet owl						res.	fc.														
Screech owl		fc.				res.	c.			res.	fc, local	Apr. 5, 30		unc.	yes.		oc.	yes.	breeds	c.	
Great horned owl		unc.				res.	c.		yes.		fc.	yes.		c.	yes.	res.	fc	yes.		c.	
Snowy owl	wv.	oc.				wv.	fc.		yes.		fc.	yes.		c.	yes.	res.	oc	yes.		c.	
American hawk owl							2 records			wv.	fc.			c.		wv.	oc.	yes.	wv.	rare.	
Burrowing owl										wv.	once, 1885										
Carolina paroquet																					
Yellow-billed cuckoo						sr.	c.		yes	sr.		yes		c.	yes		c	yes		c	
Black-billed cuckoo	sr.	c.	May 15			sr.	ab.		yes	sr.	c	yes		c.	yes		fc.	yes		c.	
Belted kingfisher	sr, wv.	c, oc				sr.	ab.	Mar. 22	yes	sr.	c.	yes		c.	yes		c	yes		c.	
Hairy woodpecker	res.	fc.				sr.	c.		yes	res.	fc.	yes		unc.	yes	res	c.	yes	res.		
Downy woodpecker	res.	c				res.	ab.		yes	res.	c.	yes		c.	yes	res.	c.	yes	res.	c.	
Arctic three-toed woodpecker	wv.	once, 29 Dec. '84				wv.	rare, 25 Dec '83			res, Ad. mts.	c.										
Am. three-toed woodpecker										res, Ad. mts.	fc.										
Yellow-bellied sapsucker	tv.		Apr.	Oct.		tv.	c.	Mar. 28		sr.	c.	yes		unc.	yes	tv.	c	yes		rare, twice	
North pileated woodpecker	tv, sr.	spring, oc.		fall			once, 11 May '83				rather rare					av.	twice				
Red-headed woodpecker	res.	c				sr.	c.		yes	res.	oc.	yes		c.	yes	res.	c.	yes		unc.	
Red-bellied woodpecker	tv.	unc.								straggler	rare		tv.	c.			rare				
Northern flicker	sr.	ab.	Apr. 3			sr.	ab.	Mar. 22	yes	sr.	ab.	yes		c.	yes		ab.	yes		ab.	
Whip-poor-will		rare				tv.	rare				c, local			rare.			oc.	yes		ab.	
Nighthawk	sr.	fc.	May			sr.	ab.		yes	sr	c.			c.	yes		c	yes		ab.	
Chimney swift	sr.	c.	Apr. 27	Oct.	yes	sr.	ab.	May 2	yes	sr.	c	yes		c.	yes		ab.	yes		ab.	
Ruby-throated hummingbird	sr.	c.	May 11			sr.	c.		yes	sr.	c.	yes		c.	yes		fc	yes	sr.	ab.	
Kingbird	sr.	c.	May 1			sr.	ab.	May 3	yes	sr.	c.	yes		c.	yes		c.	yes		ab.	
Gray kingbird																					
Arkansas kingbird																					
Crested flycatcher	sr.	unc.				sr.	c.		yes	sr	c.	yes		c.	yes		fc	yes		c	
Phœbe	sr.	c.	Apr. 3			sr.	ab.	Mar. 25	yes	sr.	c.	yes		c.	yes		c	yes	breeds	ab.	
Olive sided flycatcher										tv.						av.	once			twice	
Wood pewee	sr.	c.	Apr.			sr.	ab.		yes	sr.	c.	yes		c.	yes		c.	yes		c	
Yellow-bellied flycatcher										sr.	unc.	yes, June					rare	yes			
Green-crested flycatcher		rare																		c	
Alder flycatcher														rare	yes						
Least flycatcher	sr.	c.	May 1							sr.	fc.	yes	tv.	rare							
Skylark						sr.	c.		yes	sr.	c.	yes		c.	yes		fc.	yes		c.	
Horned lark	res.	oc.																			
Hoyt horned lark							with following														
Prairie horned lark													wv.	rare							
Blue jay	res, local					tv.	ab.	Feb. 22			c, spring	yes			yes	res.	c.	yes			
Canada jay						res.	c.			res.	c.	yes		c.	yes	res.	c.	yes			
Northern raven										res	c, Ad. mts.			unc.							
American crow	sr, wr.	c, oc								res.	c, Ad. mts.										
Fish crow						res.	ab.		yes	res.	c.	yes		c.	yes	res.	ab.	yes	res		
Starling																					
Bobolink	sr.	c.	May 3			sr.	ab.	May 13	yes	sr.	ab.	yes		c	yes		c	yes		ab.	May 1
Cowbird	sr.	fc.			yes	sr.	ab.	Mar. 26	yes	sr.	ab.	yes		c	yes		c	yes	res		
Yellow-headed blackbird																					
Red-winged blackbird	sr.	c.	Mar. 15			sr.	ab.	Mar. 22	yes	sr.	ab.	yes		c.	yes		ab.	yes			
Meadowlark	sr, wv.	c, oc				sr.	ab.	Mar. 22	yes	sr.	c.	yes		c	yes		c.	yes	sr		
Orchard oriole		rare									once, 15 May '87			rare	yes		fc	yes			
Baltimore oriole	sr.	c.	May			sr.	ab.		yes	sr.	ab.	yes		c	yes		c.	yes	sr.	c	
Bullock oriole																					
Rusty blackbird	tv.		Apr. 1			tv.	c.				several	May 7, 20, Ad. mts	tv.	c		tv.	c.		sr.	c	
Purple grackle	sr.	c.	Mar.														c.	yes	sr.	ab.	
Bronzed grackle						sr.	ab.	Mar. 18	yes	sr.	ab.	yes		c	yes						
Evening grosbeak										wv.	ac, 9 Feb. '90		wv.	rare, Feb. '90		wv.	rare				
Pine grosbeak						wv.	fc.	Mar. 15		wv.	unc.		wv.	rare							
House sparrow	res.	ab.								res.	ab.	yes									
Chaffinch																					
Greenfinch																					
Purple finch	sr.	c.	Mar.																		
American crossbill						sr.	c.	Mar. 18	yes	sr. wv.	c, oc	yes		c.	yes		fc	yes	res		
White-winged crossbill						wv.	c.			wv, sv	oc, c, Ad. mts			rare		tv.	fc	yes (?)	wv, breeds?	unc.	
Hoary redpoll						wv.	fc.			wv.	unc.					wv.	rare				
Redpoll																					
Holboell redpoll						wv.	ab.	Feb. 23		wv.	rare		wv.	unc.		wv.	c		wv.	c	
Greater redpoll																					
European linnet											Lewis co., once										
American goldfinch	sr.	unc.	Apr.																		
Pine siskin					yes	res.	ab.	Feb. 23	yes	sr. wv.	ab, oc.	yes		c.	yes	res.	ab.	yes	res	c	
European goldfinch						wv.	c.	Feb. 22		tv.	oc.	Ad. mts.	wv.	rare		wv.	oc				
Snowflake	wv.	unc																			
Lapland longspur						wv.	ab.	Mar. 1		wv.	c.			c		wv.	c.		wv.	unc.	
Chestnut-collared longspur						wv.	fc.						wv.	c		wv.	rare				
Vesper sparrow																					
Ipswich sparrow		c.	Apr. 1			sr.	ab.	Mar. 28	yes	sr.	ab.			c.	yes		c.	yes	sr.	c	
Savanna sparrow												yes		c.	yes						
Baird sparrow		fc.				sr.	c.	Mar. 29	yes	sr.	fc.	yes		c.	yes		oc	yes	tv.	c	
Grasshopper sparrow										sr, local	c.			unc.	yes				res		
Henslow sparrow																					
Leconte sparrow																					
Sharp-tailed sparrow																					
Nelson sparrow																					
Acadian sharp-tailed sparrow																					
Seaside sparrow																					
Lark sparrow											once Utica, 12 O. '83										
White-crowned sparrow	tv.	c.	May 1	Oct.																	
Gambel sparrow																					
White-throated sparrow	tv.					tv.	fc.	May 4		tv.	fc.					tv.	c		sr.	c	
Tree sparrow	wv.	c.											tv.	c						fc	
Chipping sparrow	sr	c.	Apr.			tv.	c.	Mar. 22 (!)		tv. sr.	c. oc					tv.	c.		wr.	c	
Field sparrow	sr.	c.	May			wv.	ab.		yes	tv.	ab.	yes	tv.	c		wv.	c	yes		c	
Slate-colored junco	sr.					sr.	ab.	Apr. 14	yes	sr.	ab.	yes	wr.	c	yes		ab.	yes	sr.	c	
Carolina junco		c.	Mar. 15			st.	c.	Apr. 19	yes	sr.	ab.	yes		c	yes		c.	yes	res	c	
Song sparrow	sr.					tv.	ab.	Mar. 15	yes twice	tv, sr.	ab, c.	yes		c	yes	res.	c.	yes			
Lincoln sparrow										sr		yes	wr.	c			ab.	yes	sr.	ab.	
Swamp sparrow						st.	ab.	Mar. 15	yes	tv, sr.	ab.						rare				
Fox sparrow	tv.	rare				tv.	rare	May 10		sr.	rather rare, Ad. mts	yes		c	yes	tv.	oc.	yes	sr.	c	
Towhee	sr.	c.	May 11			sr.	ab.	Apr. 19	yes	tv.	fc.	yes			yes	tv.	fc		tv.		
Cardinal						tv.	c.	Apr. 5		sr.	unc.	yes		unc.		tv.	fc.	yes	sr.	c.	
						sr.	c.	May 3	yes		oc, local		tv.	c.	yes						
						av.	rare	9 May '84						unc. once, 10 May '83		av					

SPECIES RECORDED	CHAPMAN, NEW YORK AND VICINITY, 1894							SHORT, WESTERN NEW YORK,		
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	B
Barred owl	res	c					Mar. 12	tv	rare	
Great gray owl	av	once								
Richardson owl										
Saw-whet owl	wr	fc						tv, res	rare	yes
Screech owl	res	c					Apr. 3	res	c	yes
Great horned owl	res	rare					Feb. 28	res	c	yes
Snowy owl	wv	c, irreg						wv	oc	
American hawk owl	wv	once						wv	oc	
Burrowing owl										
Carolina paroquet										
Yellow-billed cuckoo	sr	c	May 1–10			Oct. 1–10	May 30	sr		yes
Black-billed cuckoo	sr	c	May 1–10			Oct. 1–10	May 29	sr	c	yes
Belted kingfisher	sr	c	Mar. 20–31			Nov. 1–30	May 1	sr	c	yes
Hairy woodpecker	res	fc					May 23	res	fc	yes
Downy woodpecker	res	very c					May 21	res	c	yes
Arctic three-toed woodpecker										
Am. three-toed woodpecker										
Yellow-bellied sapsucker	tv	c	Apr. 10–20	Apr. 20–30	Sept. 20–30	Oct. 20–30		tv	unc	yes,
North. pileated woodpecker	av							res	rare	yes
Red-headed woodpecker	sr, tv	fc, local; ab			Sept. 1–10	Nov. 1–30	May 13	sr	c	yes
Red-bellied woodpecker	tv	rare						tv	fc	
Northern flicker	res	c					May 7	sr, wr	c, oc	yes
Whip-poor-will	sr	c, local	Apr. 20–30			Oct. 10–20	June 3	sr	rare	yes
Nighthawk	sr	c, local	May 1–10			Oct. 10–20	June 1	sr		yes
Chimney swift	sr	ab	Apr. 20–30			Oct. 1–10	May 25	sr	c	yes
Ruby-throated hummingbird	sr	c	May 1–10			Sept. 20–30	May 12	sr	c	yes
Kingbird	sr	c				Sept. 20–30	May 29	sr	c	yes
Gray kingbird										
Arkansas kingbird	av	once								
Crested flycatcher	sr	c	May 1–10			Sept. 20–30	June 3	sr	fc	yes
Phoebe	sr	c	Mar. 10–20			Oct. 20–31	Apr. 28	sr	ab	yes
Olive-sided flycatcher	tv	fc, fall		May	Aug. 15–31	Sept. 10–20		tv	rare	
Wood pewee	sr	c	May 10–20			Sept. 20–30	June 5	sr	c	yes
Yellow-bellied flycatcher	tv	fc, fall	May 10–20	May 20–30	Aug. 1–15	Sept. 20–30		sr	rare	yes
Green-crested flycatcher	sr	c	May 10–20			Sept. 1–10	May 14	sr	oc	yes
Alder flycatcher	tv, sr	rare, local	May 20–30	(?)			June 16	sr	rare	yes
Least flycatcher	sr	c					May 21	sr	c	yes
Skylark	res	local								
Horned lark	wr	c						wv	oc	
Hoyt horned lark										
Prairie horned lark	wr	rather rare						sr	c	yes
Blue jay	res	c					May 14	res		yes
Canada jay	av, ?	once								
Northern raven	av	rare								
American crow	res	ab					Apr. 9	res	c	yes
Fish crow	sr, wr	c, unc					May 17			
Starling	res	fc					yes			
Bobolink	sr	rare, formerly ab	May 1–10			Oct. 1–10	May 29	sr	ab	yes
Cowbird	sr, wv	c, rare	Mar. 10–20			Nov. 1–30	May 5	sr	ab	yes
Yellow-headed blackbird										
Red-winged blackbird	sr, tv	c, ab	Feb. 15–Mar. 10			Nov. 1–30	May 18	sr	ab	yes
Meadowlark	sr, wr	c, unc	Mar. 10–20			Nov. 1–30	May 15	sr, wr	c, few	yes
Orchard oriole	sr	c	May 1–10			Sept. 1–10	May 30	tv	rare	yes
Baltimore oriole	sr	c	May 1–10			Sept. 10–20	May 25	sr	ab	yes
Bullock oriole										
Rusty blackbird	tv	c	Feb. 15–Mar. 10	Apr., May	Oct. 1–10	Dec. 1–30		tv	c	
Purple grackle	sr, tv	local, c; ab	Feb. 15–Mar. 10			Nov. 1–30	Apr. 25			
Bronzed grackle	tv	fc			Oct. 1–10	Dec. 1–30		sr	ab	yes
Evening grosbeak	wv	1890							winter, 1889–1890	
Pine grosbeak	wv	irreg						tv	oc	
House sparrow	res	ab					yes			
Chaffinch										
Greenfinch										
Purple finch	sr, tv, wr	rare, c, unc	Apr. 1–10			Nov. 1–30	May 24	sr	c	yes
American crossbill	wv	reg						wv	unc	
White-winged crossbill	wv	rare, irreg						av	rare	
Hoary redpoll										
Redpoll	wr	irreg						wv, wv	c at times, irreg	
Holboell redpoll	wv, ?	rare, twice								
Greater redpoll	wv	2								
European linnet										
American goldfinch	res	c					June 20	sr, wr	ab, oc	yes
Pine siskin	wv, tv			May 1–31	Oct. 20–30			wv	oc	yes,
European goldfinch	res	local								
Snowflake	wr	ab						wv	ab	
Lapland longspur	wr	rare						wv	oc	
Chestnut-collared longspur	av	once								
Vesper sparrow	sr	c	Apr. 1–10			Nov. 1–30	May 10	sr	ab	yes
Ipswich sparrow	wr	c, local		Apr. 1	Oct. 15					
Savanna sparrow	sr, tv	rare, ab	Apr. 1–10	May 1–15		Nov., Dec	May 10	sr	c	yes
Baird sparrow										
Grasshopper sparrow	sr	c	May 1–10			Oct. 1–10	May 28	sr	oc	yes
Henslow sparrow	sr	fc, local					May 10			
Leconte sparrow										
Sharp-tailed sparrow	sr	ab, local					May 30			
Nelson sparrow	tv	rather rare								
Acadian sharp-tailed sparrow	tv	rather rare								
Seaside sparrow	sr	ab, local					May 30			
Lark sparrow	av	twice			Aug. 20	Nov. 26				
White-crowned sparrow	tv	rare	May 10–20	May 15–25				tv	c	
Gambel sparrow										
White-throated sparrow	wr, tv	c, local; ab		May 1–25	Sept. 20–30			tv	ab	
Tree sparrow	wr	ab		Apr. 1–30	Oct. 20–31			tv, wr	c, oc	
Chipping sparrow	sr	ab	Apr. 1–10			Nov. 1–30	May 14	sr	ab	yes
Field sparrow	sr, wr	ab, rare	Mar. 20–31			Nov. 1–30	May 15	sr	unc	yes
Slate-colored junco	wr	ab		Apr. 10, May 10	Sept. 20–30			tv	c	yes
Carolina junco										
Song sparrow	res, sr	c, ab					Apr. 29	sr	c	yes
Lincoln sparrow	tv	rare						tv	oc	
Swamp sparrow	sr, wr	ab, rare	Mar. 20–31			Nov. 1–30	May 15	sr		yes
Fox sparrow	tv, wr	c, rare	Mar. 10–20	Apr. 1–15	Oct. 10–20	Nov. 25, Dec. 5		tv	oc	
Towhee	sr	ab	Apr. 20–30			Oct. 20–30	May 14	sr	rare	yes
Cardinal	res	fc, local					May 3	av	rare, 10 May '83	

FISHER, SING SING, 1898						EATON, WESTERN NEW YORK, 1901						
nt nt	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds
	rare					res	c					yes
						wv	rare, 3 times					
	rare		Jan. 13	Oct. 28		res	oc					yes
	c					res	c					Apr. 1–25
	fc					res	c, local					Feb. 20, Mar. 15
						wv	oc		Mar.	Oct. 20		
						wv	rare					
							extinct					
	c	May 4			Oct. 31	sr	fc	May 10			Sept. 15	June 10–30
	c	May 3			Oct. 7	sr	c	May 10			Sept. 25	June 1–30
	c, oc	Apr. 1			Nov. 23	sr, wv	c, oc	Apr. 6			Nov. 1	Apr. 15, May 20
	rare					res	fc					Apr. 20, May 25
	c					res	c					Apr. 25, May 30
						wv	rare		Feb. 27	Dec. 25		
	c, oc	Apr. 5	May 13	Sept. 18	Oct. 23	tv, sr	c, oc	Apr. 10	May 15	Sept. 15	Oct. 20	yes
						res						local
	rare, c, fall			Aug. 27	Oct. 12	sr, res	c, oc	May 5			Oct. 1	May 15, June 20
						res	fc					June, local
	c, oc	Mar. 25			Oct. 30	sr, res	ab, oc	Apr. 10			Oct. 20	May 10, June 30
	c	Apr. 19			Oct. 17	sr	fc, local	May 2			Sept. 15	
	c	May 9			Oct. 11	sr	c	May 10			Sept. 25	yes
	c	Apr. 19			Oct. 23	sr	ab	Apr. 25			Sept. 30	May 15, July 10
	c	Apr. 30			Oct. 3	sr	c	May 10			Sept. 10	June 5, July 20
	c	Apr. 29			Sept. 10	sr	ab	May 1			Sept. 1	May 20, June 15
	c	May 7			Sept. 12	sr	fc	May 6			Aug. 20	May 30, June 15
	c	Mar. 14			Oct. 29	sr	ab	Apr. 5			Oct. 15	Apr. 20, June 15
	fc	May 20		Aug. 15	Sept. 16	tv	rare					
	c	May 10			Oct. 2	sr	ab	May 15			Sept. 1	June 5, July 20
	c	May 17	June 4	Aug. 8	Sept. 20	tv, sr	unc, rare					May 26, June 24
	c	May 10			Aug. 27	sr	unc	May 12			Aug.	June 4, 14
	rare	May 19	May 31		Aug. 29	sr	fc	May 10			Aug.	July 22
	fc	Apr. 25			Aug. 26	sr	c	May 6			Aug. 20	May 20, June 30
	oc					wv	fc		Mar.	Nov.		
						res, tv	c, ab					Mar. 10, Apr. 10
	fc					res	c					Apr. 1, May 10
						av	twice					
	c					res	ab					Apr. 1, May 15
	fc, breeds											
	fc	May 1			Oct. 5	sr	c	May 4			Sept. 15	May 20, June 10
	c	Mar. 22			Nov. 11	sr, res	ab, oc	Mar. 20			Oct. 25	yes
	c	Feb. 25			Nov. 11	sr	ab	Mar. 10			Nov. 10	May 3, June 15
	fc, oc	Feb. 20			Nov. 27	sr	c	Mar. 12			Nov. 20	May 10, July 10
	c	May 2			Aug. 6	sr	unc	May 15			Aug.	May 26
	c	May 2			Sept. 1	sr	ab	May 3			Sept. 1	May 15, June 10
						av	once, 17 May '79					
	c	Mar. 26	May 8	Sept. 28	Nov. 27	tv	ab, fall; fc, spring	Apr. 1	Apr. 30	Sept. 10	Nov. 15	
	fc	Feb. 15			Nov. 8							
	fc	Apr.			Nov.	sr	ab	Mar. 12			Nov. 10	Apr. 20, June 1
						wv	rare, irreg			winter, 1886, '89		
	irreg		Apr. 12	Dec. 18		wv	irreg		Mar. 15	Dec. 21		
						res	ab					yes
	rare, c					sr, tv	fc, c	Mar. 25			Nov. 5	May 10, June 15
	irreg					wv, sv	irreg, fc, ac					
	rare			Oct. 29	Dec. 6	wv	irreg		Apr. 19	Dec. 24		
	irreg		Mar. 25	Nov. 25		wv	irreg		Apr. 6	Nov. 25		
	c					res	ab					July 5, Aug. 10
	irreg					wv	irreg		Apr.	Nov.		
	irreg		Mar. 22	Oct. 25		wv	ab		Mar. 15	Oct. 25		
	oc					wv	rare					
	fc	Apr. 2			Nov. 4	sr	ab	Apr. 2			Nov. 1	May 2, June 30
	c	Apr. 3	May 13	Aug. 28	Oct. 28	sr	c	Apr. 10			Oct. 20	May 5, July 15
	c	Apr. 27			Oct. 23	sr	fc, local	May 18			Oct. 5	June 1, local
	rare			Oct. 5	Oct. 10	sr	rare, 30 June '87					
						tv	once			11 Oct. '97		
	fc			Sept. 28	Oct. 17	tv				Oct. 7	Oct. 12	
	rare			Sept. 29	Oct. 16	tv	rare			Oct. 7		
	rare	May 9	May 26	Oct. 3	Oct. 30	tv	fc	May 5	May 25	Sept. 20	Oct. 15	
	c, oc	Apr. 10	May 21	Sept. 20	Oct. 30	tv	ab	Apr. 24	May 12	Sept. 15	Oct. 30	
	c		Apr. 27	Oct. 10		wv	ab		Apr. 25	Oct. 20		
	c	Apr. 9			Nov. 7	sr	ab	Apr. 12			Oct. 25	yes
	c	Apr. 2			Nov. 7	sr	fc	Apr. 10			Nov. 1	May 15, June 20
	c		May 4	Sept. 19		tv, res	ab, oc	Mar. 25	Apr. 20	Sept. 25	Nov. 20	May 10, June 15, local
	c					sr, res	ab, rare	Mar. 10			Nov. 12	May 1, July 20
	rare			Sept. 29	Oct. 16	tv	rare	May 12			Oct. 27	
	fc, oc	Apr. 4			Dec. 2	sr	c	Apr. 15			Nov. 10	May 15, June 10
	fc	Mar. 4	Apr. 20	Oct. 14	Nov. 28	tv	fc	Mar. 25	Apr. 18	Oct. 10	Nov. 10	
	c	Apr. 21			Oct. 31	sr	fc, local	Apr. 15			Oct. 20	June 1–30
							oc	May 10				

SPECIES RECORDED	CHAPMAN, NEW YORK AND VICINITY, 1894							SHORT, WESTERN NEW YORK, 1896			FISHER, SING SING, 1898						EATON, WESTERN NEW YORK, 1901						
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds
Barred owl	res	c					Mar. 12	tv	rare		res	rare					res	c					yes
Great gray owl	av	once															wv	rare, 3 times					
Richardson owl																							
Saw-whet owl	wr	tc						tv, res	rare	yes	wv	rare		Jan. 13	Oct. 28		res	oc					yes
Screech owl	res	c					Apr. 3	res	c	yes	res	c					res	c					Apr. 1–25
Great horned owl	res	rare					Feb 28	res	c	yes	res	fc					res	c, local					Feb. 20, Mar. 15
Snowy owl	wv	c, irreg						wv	oc		av						wv	oc		Mar	Oct. 20		
American hawk owl	wv	once						wv	oc								wv	rare					
Burrowing owl																							
Carolina paroquet																		extinct					
Yellow-billed cuckoo	sr	c	May 1–10			Oct. 1–10	May 30	sr		yes	sr	c	May 4			Oct. 31	sr	fc	May 10			Sept. 15	June 10–30
Black-billed cuckoo	sr	c	May 1–10			Oct 1–10	May 29	sr	c	yes	sr	c	May 3			Oct. 7	sr	c	May 10			Sept 25	June 1–30
Belted kingfisher	sr	c	Mar 20–31			Nov 1–30	May 1	sr	c	yes	sr, wv	c, oc	Apr. 1			Nov. 23	sr, wv	c, oc	Apr 6			Nov. 1	Apr. 15, May 20
Hairy woodpecker	res	fc					May 23	res	fc	yes	res	rare					res	fc					Apr. 20, May 25
Downy woodpecker	res	very c					May 21	res	c	yes	res	c					res	c					Apr. 25, May 30
Arctic three-toed woodpecker																	wv	rare		Feb. 27	Dec. 25		
Am three-toed woodpecker																							
Yellow-bellied sapsucker	tv	c	Apr 10–20	Apr. 20–30	Sept. 20–30	Oct. 20–30		tv	unc	yes, rare	tv, wv	c, oc	Apr 5	May 13	Sept. 18	Oct. 23	tv, sr	c, oc	Apr. 10.	May 15	Sept. 15	Oct. 20	yes
North. pileated woodpecker	av							res	rare	yes							res						local
Red-headed woodpecker	sr, tv	fc, local, ab			Sept. 1–10	Nov. 1–30	May 13	sr	c	yes	res, tv	rare, c, fall			Aug. 27	Oct. 12	sr, res	c, oc	May 5			Oct. 1	May 15, June 20
Red-bellied woodpecker	tv	rare						tv	fc								res	fc					June, local
Northern flicker	res	c					May 7	sr, wr	c, oc	yes	sr, res	c, oc	Mar. 25			Oct. 30	sr, res	ab, oc	Apr 10			Oct. 20	May 10, June 30
Whip poor-will	sr	c, local	Apr 20–30			Oct 10–20	June 3	sr	rare	yes	sr	c	Apr. 19			Oct. 17	sr	fc, local	May 2			Sept. 15	
Nighthawk	sr	c, local	May 1–10			Oct. 10–20	June 1	sr		yes	sr	c	May 9			Oct. 11	sr	c	May 10			Sept. 25	yes
Chimney swift	sr	ab	Apr 20–30			Oct 1–10	May 25	sr	c	yes	sr	c	Apr. 19			Oct. 23	sr	ab	Apr 25			Sept. 30	May 15, July 10
Ruby-throated hummingbird	sr	c	May 1–10			Sept 20–30	May 12	sr	c	yes	sr	c	Apr. 30			Oct. 3	sr	c	May 10			Sept. 10	June 5, July 20
Kingbird	sr	c				Sept. 20–30	May 29	sr	c	yes	sr	c	Apr. 29			Sept. 10	sr	ab	May 1			Sept. 1	May 20, June 15
Gray kingbird																							
Arkansas kingbird	av	once																					
Crested flycatcher	sr	c	May 1–10			Sept 20–30	June 3	sr	fc	yes	sr	c	May 7			Sept. 12	sr	fc	May 6			Aug. 20	May 10, June 15
Phoebe	sr	c	Mar. 10–20			Oct 20–31	Apr 28	sr	ab	yes	sr	c	Mar. 14			Oct. 29	sr	ab	Apr. 5			Oct. 15	Apr 20, June 15
Olive-sided flycatcher	tv	fc, fall		May	Aug. 15–31	Sept. 10–20		tv	rare		tv	fc	May 20		Aug. 15	Sept 16	tv	rare					
Wood pewee	sr	c	May 10–20			Sept. 20–30	June 5	sr	c	yes	sr	c	May 10			Oct. 2	sr	ab	May 15			Sept 1	June 5, July 20
Yellow-bellied flycatcher	tv	fc fall	May 10–20	May 20–30	Aug. 1–15	Sept. 20–30		sr	rare	yes	tv	c	May 17	June 4	Aug. 8	Sept. 20	tv, sr	unc, rare					May 26, June 21
Green-crested flycatcher	sr	c	May 10–20			Sept 1–10	May 14	sr	oc	yes	sr	c	May 10			Aug. 27	sr	unc	May 12			Aug	June 4, 14
Alder flycatcher	tv, sr	rare, local	May 20–30	(?)			June 16	sr	rare	yes	tv	rare	May 19	May 31		Aug. 29	sr	fc	May 10			Aug	July 22
Least flycatcher	sr	c					May 21	sr	c	yes	sr	fc	Apr. 25			Aug. 26	sr	c	May 6			Aug 20	May 20, June 30
Skylark	res	local																					
Horned lark	wr	c						wv	oc		wv	oc					wv	fc		Mar	Nov		
Hoyt horned lark																							
Prairie horned lark	wr	rather rare						sr	c	yes							res, tv	c, ab					Mar. 10, Apr. 10
Blue jay	res	c					May 14	res		yes	res	fc					res	c					Apr. 1, May 10
Canada jay	av	once																					
Northern raven	av	rare															av	twice					
American crow	res	ab					Apr. 9	res	c	yes	res	c					res	ab					Apr. 1, May 15
Fish crow	sr, wr	c, unc					May 17				res, sr	fc, breeds											
Starling	res	fc					yes																
Bobolink	sr	rare, formerly ab	May 1–10			Oct. 1–10	May 29	sr	ab	yes	sr	fc	May 1			Oct 5	sr	c	May 4			Sept 15	May 20, June 10
Cowbird	sr, wv	c, rare	Mar. 10–20			Nov. 1–30	May 5	sr	ab	yes	sr	c	Mar. 22			Nov. 11	sr, res	ab, oc	Mar. 20			Oct. 25	yes
Yellow-headed blackbird																							
Red-winged blackbird	sr, tv	c, ab	Feb. 15–Mar. 10			Nov. 1–30	May 18	sr	ab	yes	sr	c	Feb. 25			Nov. 11	sr	ab	Mar 10			Nov. 10	May 5, June 15
Meadowlark	sr, wr	c, unc	Mar. 10–20			Nov. 1–30	May 15	sr, wr	c, few	yes	sr, res	fc, oc	Feb. 20			Nov. 27	sr	c	Mar. 12			Nov. 20	May 10, July 10
Orchard oriole	sr	c	May 1–10			Sept. 1–10	May 30	tv	rare	yes (?)	sr	c	May 2			Aug. 6	sr	unc	Mar 15			Aug	May 16
Baltimore oriole	sr	c	May 1–10			Sept. 10–20	May 25	sr	ab	yes	sr	c	May 2			Sept. 1	sr	ab	May 3			Sept. 1	May 15, June 10
Bullock oriole																	av	once, 17 May '79					
Rusty blackbird	tv	c	Feb 15–Mar. 10	Apr., May	Oct. 1–10	Dec. 1–30		tv	c		tv	c	Mar. 26	May 8	Sept. 28	Nov. 27	tv	ab, fall; fc, spring	Apr. 1	Apr. 30	Sept. 10	Nov. 15	
Purple grackle	sr, tv	local, c, ab	Feb. 15–Mar. 10			Nov. 1–30	Apr. 25				sr	fc	Feb. 15			Nov. 8							
Bronzed grackle	tv	fc			Oct. 1–10	Dec. 1–30		sr	ab	yes	tv	fc	Apr			Nov	sr	ab	Mar 12		winter, 1886, '89	Nov. 10	Apr. 20, June 1
Evening grosbeak	wv	1890							winter, 1889–1890								wv	rare, irreg		Mar 15	Dec. 21		
Pine grosbeak	wv	irreg						tv	oc		wv	irreg		Apr. 12	Dec. 18		wv	irreg					yes
House sparrow	res	ab					yes				x						res	ab					
Chaffinch																							
Greenfinch																							
Purple finch	sr, tv, wr	rare, c, unc	Apr 1–10			Nov. 1–30	May 24	sr	c	yes	res, tv	rare, c					sr, tv	fc, c	Mar 25			Nov 5	May 10, June 15
American crossbill	wv	reg						wv	unc		res	irreg					wv, sv	irreg, fc, ac					
White-winged crossbill	wv	rare, irreg						av	rare		tv	rare			Oct. 29	Dec. 6	wv	irreg		Apr. 19	Dec. 24		
Hoary redpoll																							
Redpoll	wr	irreg						wv, wv	c at times, irreg		wv	irreg		Mar. 25	Nov. 25		wv	irreg		Apr 6	Nov. 25		
Holboell redpoll	wv, ?	rare, twice									av												
Greater redpoll	wv	2																					
European linnet																							July 5, Aug 10
American goldfinch	res	c					June 20	sr, wr	ab, oc	yes	res	c					res	ab		Apr	Nov		
Pine siskin	wv, tv			May 1–31	Oct. 20–30			wv	oc	yes, rare	res	irreg					wv	irreg					
European goldfinch	res	local									wv									Mar. 15	Oct. 25		
Snowflake	wr	ab						wv	ab		wv	irreg		Mar. 22	Oct. 25		wv	ab					
Lapland longspur	wr	rare						wv	oc		wv	oc					wv	rare				Nov. 1	May 2, June 30
Chestnut-collared longspur	av	once									av												
Vesper sparrow	sr	c																				Oct 20	May 5, July 15
Ipswich sparrow	wr	c local	Apr. 1–10			Nov. 1–30	May 10	sr	ab	yes	sr	fc	Apr. 2			Nov. 4	sr	ab	Apr 2				
Savanna sparrow	sr, tv	rare, ab		Apr. 1	Oct. 15						tv	c	Apr. 3	May 13	Aug. 28	Oct. 28	sr	c	Apr 10			Oct 5	June 1, local
Baird sparrow			Apr. 1–10	May 1–15		Nov., Dec	May 10	sr	c	yes	sr	c	Apr 27			Oct. 23	sr	fc, local	May 18				
Grasshopper sparrow	sr	c	May 1–10			Oct. 1–10	May 28	sr	oc	yes	tv	rare			Oct 5	Oct. 10	sr	rare, 30 June '87			11 Oct '97		
Henslow sparrow	sr	fc, local					May 10				tv						tv	once					
Leconte sparrow																					Oct 7	Oct. 12	
Sharp-tailed sparrow	sr	ab, local					May 30				tv	fc			Sept 28	Oct. 17	tv				Oct 7		
Nelson sparrow	tv	rather rare									tv	rare			Sept. 29	Oct 16	tv	rare					
Acadian sharp-tailed sparrow	tv	rather rare									av												
Seaside sparrow	sr	ab, local																					
Lark sparrow	av	twice					May 30				tv	rare	May 9	May 26	Oct. 3	Oct. 30	tv		May 5	May 25	Sept 20	Oct 15	
White-crowned sparrow	tv	rare	May 10–20	May 15–25	Aug. 20	Nov. 20		tv	c									fc					
Gambel sparrow											tv, wv	c, oc	Apr. 10	May 21	Sept 20	Oct. 30	tv	ab	Apr 24	May 12	Sept. 15	Oct 30	
White throated sparrow	wr, tv	c, local, ab									wv						wv	ab		Apr. 25	Oct 20		
Tree sparrow	wr	ab		May 1–25	Sept. 20–30			tv	ab		sr	c		Apr. 27	Oct 10		tv	ab	Apr. 12			Oct 25	yes
Chipping sparrow	sr	ab	Apr. 1–10	Apr. 1–30	Oct. 20–31			tv, wr	c, oc	yes	sr	c	Apr. 9			Nov. 7	wv	ab	Apr. 10			Nov 1	May 15, June 20
Field sparrow	sr, wr	ab, rare	Mar. 20–31			Nov. 1–30	May 14	sr	ab	yes	wv	c	Apr. 2			Nov. 7	sr	fc	Mar. 25	Apr 20	Sept 25	Nov. 20	May 10, June 15, local
Slate-colored junco	wr	ab		Apr. 10, May 10	Sept. 20–30	Nov. 1–30	May 15	sr	unc	yes		c		May 4	Sept. 19		sr, res	ab, oc				Nov 12	May 1, July 20
Carolina junco								tv	c	yes	res	c							Mar 10			Oct. 27	
Song sparrow	res, sr	c ab					Apr. 29	sr	c	yes	tv	rare			Sept. 29	Oct. 16	tv	ab, rare	May 12			Nov. 10	May 15, June 10
Lincoln sparrow	tv	rare						tv	oc		sr, res	fc, oc				Dec. 2	tv	rare	Apr 15			Nov 10	
Swamp sparrow	sr, wr	ab, rare	Mar 20–31			Nov. 1–30	May 15	sr		yes	tv	fc	Apr 4			Nov. 28	sr	c	Mar 25	Apr 18	Oct. 10	Oct. 20	June 1–30
Fox sparrow	tv, wr	c, rare	Mar 10–20	Apr 1–15	Oct. 10–20	Nov. 25, Dec. 5		tv	oc		sr	c	Mar 4	Apr. 20	Oct. 14	Oct. 31	tv	fc	Apr 15				
Towhee	sr	ab	Apr. 20–30			Oct. 20–30	May 14	sr	rare	yes	av	c	Apr. 21				sr	fc, local	May 10				
Cardinal	res	fc, local					May 3	av	rare, 10 May '83									oc					

SPECIES RECORDED	EMBODY, MADISON COUNTY, 1901									
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south
Barred owl	wv	fc						res	rare	
Great gray owl										
Richardson owl										
Saw-whet owl		rare, once						res		
Screech owl	res	c					yes	res	c	
Great horned owl	res	fc					yes	res	c	
Snowy owl	wv	oc						wv	irreg, c	
American hawk owl								wv	once, 1863	
Burrowing owl										
Carolina paroquet										
Yellow-billed cuckoo	sr	unc					yes	sr	c	May 11, 18, 28
Black-billed cuckoo	sr	c					May 29	sr	c	May 7, 21, 24
Belted kingfisher	sr	ab	Apr. 15			Oct. 20	May 1	sr, res	c, rare	Mar. 11, Apr. 6, 1
Hairy woodpecker	sr	ab					yes	res	fc	
Downy woodpecker	res	ab					yes	res	fc	
Arctic three-toed woodpecker								wv	once, 1887	
Am. three-toed woodpecker										
Yellow-bellied sapsucker	tv, sr	ab, unc	Apr. 20	May 10			yes	tv	c	Apr. 12, 14
North. pileated woodpecker		once						av		
Red-headed woodpecker	sr, res	c, oc					yes	tv, res	c, irreg; rare	Apr. 8
Red-bellied woodpecker	tv	twice, rare; irreg, once						av	3 records	
Northern flicker	sr	ab					May 21	sr, res	ab, oc	Feb. 12, Mar. 27,
Whip-poor-will	sr	local						sr	c	Apr. 16, 27, May
Nighthawk	sr, tv	local; rare, twice						sr	c	May 4, 6, 30
Chimney swift	sr	ab	Apr. 20			Sept. 1	yes	sr	ab	Apr. 24, May 6, 1
Ruby-throated hummingbird	sr	c	May 15			Sept. 8	yes	sr	fc	May 4, 10, 18
Kingbird	sr	c	May 1			Sept. 25	yes	sr	c	Apr. 21, 30, May
Gray kingbird								av	once	
Arkansas kingbird										
Crested flycatcher	sr	c	May 5			Sept. 1	yes	sr	c	May 4, 12, 20
Phoebe	sr	ab	Apr. 4			Oct. 10	yes	sr	ab	Mar. 31, Apr. 3, 5
Olive-sided flycatcher								tv	unc	May 24
Wood pewee	sr	ab	May 3			Sept. 1	yes	sr	c	May 7, 12, 22
Yellow-bellied flycatcher	sr	unc	May 5					tv		May 19
Green-crested flycatcher								sr		
Alder flycatcher	sr	fc	May 12			Sept. 1	yes	tv, sr	unc, ?	
Least flycatcher	sr	ab	May 1			Sept. 5	yes	sr	c	May 6, 11, 14
Skylark								res		
Horned lark	wv	unc						wv	c	
Hoyt horned lark										
Prairie horned lark	res	c					yes	tv, sr	unc, ?	
Blue jay	res, tv	fc, ab					yes	res	c	
Canada jay										
Northern raven									once, 1836	
American crow	res	ab					yes	res	c	
Fish crow								sr	rare	Mar. 16, Apr. 20
Starling								res	local	
Bobolink	sr	ab	May 6			Sept. 20	yes	sr	c	May 1, 12, 18
Cowbird	sr	ab	Apr. 1			Oct. late	yes	sr, res	c, oc	Mar. 24, Apr. 3, 1
Yellow-headed blackbird										
Red-winged blackbird	sr	ab	Mar. 20			Oct. late	yes	sr	ab	Feb. 19, Mar. 12,
Meadowlark	sr, res	ab, oc					yes	sr, res	c, fc	Feb. 5, 11, Mar. 1
Orchard oriole		rare, 2	26 May, '99					sr	fc	May 1, 6, 10
Baltimore oriole	sr	ab	May 6			Sept. 5	yes	sr	c	Apr. 29, May 3, 1
Bullock oriole										
Rusty blackbird	tv	ab, fall						tv	c	Mar. 21, Apr. 9, 1
Purple grackle								sr, wv	ab, rare	Feb. 18, Mar. 7, A
Bronzed grackle	sr	c	Apr. 1				yes	tv	oc	Mar. 13, 29
Evening grosbeak										
Pine grosbeak	wv	oc						wv	oc	
House sparrow	res	ab					yes	res	ab	
Chaffinch										
Greenfinch										
Purple finch	sr	ab	Apr. 15			July 1	yes	sr, wv	fc, unc	Mar. 13, Apr. 11,
American crossbill	wv, res	oc, oc						wv, res	irreg, once	
White-winged crossbill								wv	oc	
Hoary redpoll										
Redpoll	wv	c						wv	fc, irreg	
Holboell redpoll										
Greater redpoll										
European linnet										
American goldfinch	sr, res	ab, oc					yes	res, sr	c, ab	Feb. 4, 22, Mar. 2
Pine siskin	tv	rare						wv, tv	fc, ab, irreg	
European goldfinch										
Snowflake	wv	c		Mar. 5	Dec. 5			wv	c	
Lapland longspur								wv	oc	
Chestnut-collared longspur								av	twice	
Vesper sparrow	sr	ab	Apr. 5			Oct. 10	yes	sr, res	ab, oc	Mar. 25, Apr. 5, 1
Ipswich sparrow								wv	fc, local	
Savanna sparrow	sr	c	Apr. 28				yes	sr, res	c, fc	Mar. 29, Apr. 2, 1
Baird sparrow								av	once, 13 Nov. '99	
Grasshopper sparrow	sr	fc					yes	sr	fc	May 6, 9, 12
Henslow sparrow									once	
Leconte sparrow										
Sharp-tailed sparrow								sr, res	c, oc	Apr. 18, 29, May
Nelson sparrow	tv	rare			Oct. 8	Oct. 17				
Acadian sharp-tailed sparrow	tv	rare, once								
Seaside sparrow								sr	ab	Apr. 22, May 2, 1
Lark sparrow								av		
White-crowned sparrow	tv	fc	May 5	May 25	Sept. 25	Oct. 5		tv	unc	Apr. 25, May 9
Gambel sparrow										
White-throated sparrow	tv, sr	c, local	May 1	May 25	Sept. 20	Oct. 5	yes	tv, wv	ab, fc	Feb. 24, Mar. 5, A
Tree sparrow	tv, wv	ab, oc		May 5	Oct. 10			wv	ab	
Chipping sparrow	sr	ab	Apr. 15				yes	sr	ab	Feb. 17, Mar. 30,
Field sparrow	sr	c	Apr. 21				yes	sr, res	c, oc	Feb. 6, Mar. 20, A
Slate-colored junco	tv, res	c, oc		May 10	Oct. 1		yes	tv, wv	ab, c	
Carolina junco										
Song sparrow	sr, res	ab, rare	Mar. 25				yes	sr, res	ab, fc	Feb. 3, 22, Mar. 1
Lincoln sparrow	tv	once						tv	unc	May 9
Swamp sparrow	sr	c	Apr. 20			Oct. 25, Dec. 1	yes	sr, res	fc, oc	Mar. 31, Apr. 12,
Fox sparrow	tv	c	Apr. 28	May 12	Oct. 8	Nov. 25		tv, wv	ab, unc	Feb. 22, Mar. 13,
Towhee	sr	local					yes	sr	c	Apr. 16, May 5, 1
Cardinal								sv, res	unc, rare	

NG ISLAND, DUTCHER, ET AL.				HOFFMAN, EASTERN N. Y., 1904		BRAISLIN, LONG ISLAND, 1907		
Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Resident or transient	Common or rare	Arrives from south
			May 1	res		tv	rare	
30	Nov. 4, 15			res, wv	rare, local	res	rare	
			Apr. 20, May 3, June 4	res	c	res	unc	
ar. 17, Apr. 14	Oct. 17, Nov. 16, 29		Feb. 17, Mar. 9, Apr. 3	res		res	rare	
				wv		wv	oc	
							once	
		Sept. 13, 18	June 9, 15, Aug. 24	sr	c	sr	c	May 30
		Sept. 23, 29, Oct. 11		sr	c	sr	c	May 15
		Sept. 30, Oct. 4, Nov. 13	Apr. 15, May 7, 12	sr, res	c, oc	sr	c	Apr. 8
				res	fc	res	rare	
				res	c	res	fc	
				res	local	wv	once	
	Sept. 26, Oct. 1	Oct. 15, 21, Dec. 2		tv, sr, wv	c; c, oc, local	tv	fc	Apr. 27
				res		av		
7	Sept. 18, 23	Oct. 1, 17		res	c, local	sr	rare	Mar. 23
							very rare	
		Oct. 4, 16, Nov. 12	Apr. 18, June 13	sr, res	c; fc, local	sr, wv	ab, oc	Mar. 14
		Sept. 21, Oct. 6	May 30	sr	c, local	sr	c, local	Apr. 18
		Sept. 14, Oct. 15, Nov. 3	yes	sr	c, local	sr	c, local	Apr. 25, May 8
		Oct. 11		sr	ab	sr	c	Apr. 27
		Sept. 10, 17, Oct. 15	June 8, 14			sr	unc	May 11
		Aug. 29, Sept. 5	May 26, June 10, 16	sr	c	sr	c	Apr. 30
						av	once	
			June 1, 6, July 6	sr		sr	c	May 4
		Sept. 1, 15, Oct. 20	Apr. 25, May 5	sr	c	sr	c	Mar. 23
	Aug. 19, 29	Sept. 26		tv, sr	unc; fc, local	tv	unc	May 24
		Sept. 4, 23, Oct. 19	June 16, 27	sr	fc	sr	c	May 16
	Aug. 4, 19	Sept. 2, 18		tv, sr	unc, local	tv	rare	May 19
			17 June '88, 10 June '93	sr	c, local	sr	fc, local	May 19
				tv, sr	fc, local	tv	(?)	
		Sept	June 17	sr	ab	sr	fc	May 12
			2 July '87, 28 July '95			res	local	
				wv	c, local	wv	ab	
				sr	local	res(?)	rare	
			May 19	res	c	res	c	
				res	local			
				(?)		av		
			Apr. 16, 30, May 7	res	ab	res	c	
			yes	res	c, local	sr	c	Mar. 11
				res	local	res	c, local	
		Sept. 18, 30		sr	c	sr	c	May 12
		Oct. 22, Nov. 7	yes	sr		sr, wv	ab, oc	Mar. 15
		Nov. 15, Dec. 25	May , June 4	sr	c	sr	c	Feb. 25
		Dec. 19	June 19	sr, res	c, fc, local	sr, wv	c, unc	Mar. 7
		Sept	June 3, 22	sr	c, local	sr	unc	May 11
		Sept. 7	yes	sr	c	sr	c	May 3
, June 3	Oct. 7, 17, 22	Nov. 4, 20, Dec. 3		tv	c	tv	c	Mar. 18
		Oct. 24, Nov. 5, 16	Apr. 3	sr	c, local	sr	c	Feb. 23
						tv	rare	
	Nov. 26, Dec. 4			wv	irreg	wv	oc	
			yes			res	ab	
		Oct. 26, Nov. 26	yes	res, tv	irreg, c	res, tv	rare, fc	
, June 3	Nov. 24, Dec. 18		10 Apr. '83	res, wv	c; c, local	wv	c	
	Nov. 7, 20			wv, sr	irreg, local	wv	rare	
5, 31	Nov. 24, Dec. 10			wv	irreg	wv	unc, irreg	
		Oct. 9, Nov. 3, Dec. 29	yes	res	c	res	c	
	Oct. 4, 12			res, tv	ab, ab; local	wv	c	
				res, local				
, 24	Oct. 23, Nov. 1, 24			wv	c, local	wv	ab at times, fc	
, Apr. 18	Oct. 18, Nov. 26, Dec. 28			wv	rare	wv	rare	
9	14 Sept. '91					av		
		Oct. 29, Nov. 5, 12	yes	sr	c	sr, wv	c, rare	Apr. 1
5, Apr. 10	Oct. 12, 19, 23			wv, local		wv	c, local	
		Oct. 14, 22, Nov. 15	yes	sr	c, local	res, tv	rare, ab	
						av		
		Sept. 22, Oct. 25	May 29, June 12	sr	c, local	sr	ab	Apr. 21
						tv, sr (?)	rare	
		Oct. 11, 17, Nov. 2	May 26, June 5	sr	c, local	sr, wv	c, oc	Apr. 28
						tv		
						tv	fc	
		Sept. 21, Oct. 1, 17	May 23, 30, June 14	sr, local		sr	c	Apr. 27
	July 28, Aug. 20	Nov. 27				av	4	
	Sept. 26, Oct. 10	Oct. 16, 24, Nov. 17		tv	rare	tv	rare	Apr. 10
20	Sept. 29, Oct. 11, 14	Nov. 23		tv, sr, wv	c; c, unc, local	tv, wv	ab, c	
, 22	Oct. 9, 16, Nov. 2			wv	c	wv	ab	
		Oct. 9, 26, Nov. 8	May 2, 20, June 15	sr	ab	sr	c	Apr. 1
		Oct. 26, Nov. 5, Dec. 21	May 14, June 21	sr	c, local	sr	c	Mar. 27
, May 5	Sept. 23, 29, Oct. 12			wv, sr	c, c; local	wv	c	
		Nov. 5, 26, Dec. 19	May 15, 19, 30	sr, res	ab, c, local	res	ab	
	Sept. 17, 28	Oct. 8, 11, 16		tv	rare	tv	rare	May 9
		Oct. 11, 20	June 4	sr, local		sr, tv, wv	unc, c, rare	Apr. 16
0	Oct. 12, 22, 24	Nov. 8, 22, Dec. 29		tv	c	tv	c	Mar. 7
		Oct. 22, Nov. 4, 20	May 16, June 3, 20	sr	c	sr	c	Apr. 23
			8 June '84	res, local		sr	rare	Apr. 11

SPECIES RECORDED	EMBODY, MADISON COUNTY, 1901							LONG ISLAND, DUTCHER, ET AL.							HOFFMAN, EASTERN N. Y., 1904		BRAISLIN, LONG ISLAND, 1907		
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Resident or transient	Common or rare	Arrives from south
Barred owl	wv	fc						res	rare					May 1	res		tv	rare	
Great gray owl																			
Richardson owl																			
Saw-whet owl		rare, once						res			Mar. 13, 30	Nov. 4, 15			res, wv	rare, local	res	rare	
Screech owl	res	c						res	c					Apr. 20, May 3, June 4	res	c	res	unc	
Great horned owl	res	fc						res	c					Feb. 17, Mar. 9, Apr. 3	res		res	rare	
Snowy owl	wv	oc						wv	irreg, c		Feb. 3, Mar. 17, Apr. 14	Oct. 17, Nov. 16, 29			wv		wv	oc	
American hawk owl								wv	once, 1863									once	
Burrowing owl																			
Carolina parquet																			
Yellow-billed cuckoo	sr	unc					yes	sr	c	May 11, 18, 28			Sept. 13, 18	June 9, 15, Aug. 24	sr	c	sr	c	May 30
Black-billed cuckoo	sr	c					May 29	sr	c	May 7, 21, 24			Sept. 23, 30, Oct. 11		sr	c	sr	c	May 15
Belted kingfisher	sr	ab	Apr. 15			Oct. 20	May 1	sr, res	c, rare	Mar. 11, Apr. 6, 15			Sept. 30, Oct. 4, Nov. 13	Apr. 15, May 7, 12	sr, res	c, oc	sr	c	Apr. 8
Hairy woodpecker	sr	ab					yes	res	fc						res	fc	res	rare	
Downy woodpecker	res	ab					yes	res	fc						res	c	res	fc	
Arctic three-toed woodpecker								wv	once, 1887						res	local	wv	once	
Am. three-toed woodpecker																			
Yellow-bellied sapsucker	tv, sr	ab, unc	Apr 20	May 10			yes	tv	c	Apr. 12, 14	May 1, 6	Sept. 26, Oct. 1	Oct. 15, 21, Dec. 2		tv, sr, wv	c, c, oc, local	tv	fc	Apr. 27
North pileated woodpecker		once						av							res		av		
Red-headed woodpecker	sr, res	c, oc					yes	tv, res	c, irreg; rare	Apr. 8	May 12, 17	Sept. 18, 23	Oct. 1, 17		res	c, local	sr	rare	Mar. 23
Red-bellied woodpecker	tv	twice, rare, irreg, once						av	3 records									very rare	
Northern flicker	sr	ab					May 21	sr, res	ab, oc	Feb. 12, Mar. 27, Apr. 18			Oct. 4, 16, Nov. 12	Apr. 18, June 13	sr, res	c, fc, local	sr, wv	ab, c	Mar. 14
Whip-poor-will	sr	local						sr	c	Apr. 16, 27, May 6			Sept. 21, Oct. 6	May 30	sr	c, local	sr	c, local	Apr. 18
Nighthawk	sr, tv	local; rare, twice						sr	c	May 4, 6, 30			Sept. 14, Oct. 15, Nov. 3	yes	sr	c, local	sr	c, local	Apr. 25, May 8
Chimney swift	sr	ab	Apr. 20			Sept. 1	yes	sr	ab	Apr. 24, May 0, 10			Oct. 11		sr	ab	sr	c	Apr. 27
Ruby-throated hummingbird	sr	c	May 15			Sept. 8	yes	sr	fc	May 4, 10, 18			Sept. 10, 17, Oct. 15	June 8, 14			sr	unc	May 11
Kingbird	sr	c	May 1			Sept. 25	yes	sr	c	Apr. 21, 30, May 10			Aug. 29, Sept. 5	May 26, June 10, 16	sr	c	sr	c	Apr. 30
Gray kingbird								av	once								av	once	
Arkansas kingbird																			
Crested flycatcher	sr	c	May 5			Sept. 1	yes	sr	c	May 4, 12, 20				June 1, 6, July 6	sr		sr	c	May 4
Phoebe	sr	ab	Apr. 4			Oct. 10	yes	sr	ab	Mar. 31, Apr. 3, 5			Sept. 1, 15, Oct. 20	Apr. 25, May 5	sr	c	sr	c	Mar. 23
Olive-sided flycatcher								tv	unc	May 24		Aug. 19, 29	Sept. 26		tv, sr	unc, fc, local	tv	unc	May 24
Wood pewee	sr	ab	May 3			Sept. 1	yes	tv	c	May 7, 12, 22			Sept. 4, 23, Oct. 19	June 16, 27	sr	fc	sr	c	May 16
Yellow-bellied flycatcher	sr	unc	May 5					tv		May 19	June 10	Aug. 4, 19	Sept. 2, 18		tv, sr	unc, local	tv	rare	May 19
Green-crested flycatcher								sr						17 June '88, 10 June '93	sr	c, local	sr	fc, local	May 19
Alder flycatcher	sr	fc	May 12			Sept. 1	yes	tv, sr	unc, ?						tv, sr	fc, local	tv	(?)	
Least flycatcher	sr	ab	May 1			Sept. 5	yes	sr	c	May 6, 11, 14			Sept	June 17	sr	ab	sr	fc	May 12
Skylark								res						2 July '87, 28 July '95			res	local	
Horned lark	wv	unc						wv	c						wv	c, local	wv	ab	
Hoyt horned lark																			
Prairie horned lark	res																		
Blue jay	res, tv	fc, ab					yes	tv, sr	unc, ?						sr	local	res (?)	rare	
Canada jay							yes	res	c					May 19	res	c	res	c	
Northern raven															res	local			
American crow	res	ab							once, 1836						(?)		av		
Fish crow							yes	res	c					Apr. 16, 30, May 7	res	ab	res	c	
Starling								sr	rare	Mar. 16, Apr 20				yes	res	c, local	sr	c	Mar. 11
Bobolink	sr	ab	May 6			Sept. 20	yes	res	local						res	local	res	c, local	
Cowbird	sr	ab	Apr. 1			Oct. late	yes	sr	c	May 1, 12, 18			Sept. 18, 30		sr	c	sr	c	May 12
Yellow-headed blackbird								sr, res	c, oc	Mar. 24, Apr. 3, 19			Oct. 22, Nov. 7	yes	sr		sr, wv	ab, oc	Mar. 15
Red-winged blackbird	sr	ab																	
Meadowlark	sr, res	ab, oc	Mar. 20			Oct. late	yes	sr	ab	Feb. 19, Mar. 12, 14			Nov. 15, Dec. 25	May 4, June 4	sr	c	sr	c	Feb. 25
Orchard oriole		rare, 2	26 May, '99				yes	sr, res	c, fc	Feb. 5, 11, Mar. 18			Dec. 19	June 19	sr, res	c, fc, local	sr, wv	c, unc	Mar. 7
Baltimore oriole	sr	ab	May 6			Sept. 5	yes	sr	fc	May 1, 6, 10			Sept	June 3, 22	sr	c, local	sr	unc	May 11
Bullock oriole								sr	c	Apr. 29, May 3, 10			Sept. 7	yes	sr	c	sr	c	May 3
Rusty blackbird	tv	ab, fall																	
Purple grackle								tv	c	Mar. 21, Apr. 9, 12	May 8, 22, June 3	Oct. 7, 17, 22	Nov. 4, 20, Dec. 3		tv	c	tv	c	Mar. 18
Bronzed grackle	sr	c	Apr. 1					sr, wv	ab, rare	Feb. 18, Mar. 7, Apr. 6			Oct. 24, Nov. 5, 16	Apr. 3	sr	c, local	sr	c	Feb. 23
Evening grosbeak								yes	tv	oc							tv	rare	
Pine grosbeak	wv	c									Feb. 28								
House sparrow	res	ab						wv	oc			Nov. 26, Dec. 4			wv	irreg	wv	oc	
Chaffinch							yes	res	ab					yes			res	ab	
Greenfinch																			
Purple finch	sr	ab	Apr. 15			July 1	yes	sr, wv	fc, unc	Mar. 13, Apr. 11, 26				yes	res, tv	irreg, c	res, tv	rare, fc	
American crossbill	wv, res	oc, oc						wv, res	irreg, once		Apr. 5, 23, June 3		Oct. 26, Nov. 26	10 Apr. '83	res, wv	c, c, local	wv	c	
White-winged crossbill								wv	oc		Jan. 18	Nov. 24, Dec. 18			wv, sr	irreg, local	wv	rare	
Hoary redpoll												Nov. 7, 20							
Redpoll	wv	c						wv	fc, irreg		Mar. 19, 25, 31	Nov. 24, Dec. 10			wv	irreg	wv	unc, irreg	
Holboell redpoll																			
Greater redpoll																			
European linnet																			
American goldfinch	sr, res	ab, oc					yes	res, sr	c, ab	Feb. 4, 22, Mar. 26				yes	res	c	res	c	
Pine siskin	tv	rare						wv, tv	fc, ab, irreg		May 3, 15	Oct. 4, 12	Oct. 9, Nov. 3, Dec. 29		res, tv	ab, ab; local	wv	c	
European goldfinch															res, local				
Snowflake	wv	c		Mar. 5	Dec. 5			wv	c		Mar. 6, 12, 24	Oct. 23, Nov. 1, 24			wv	c, local	wv	ab at times, fc	
Lapland longspur								wv	oc		Feb 7, 28, Apr. 18	Oct. 18, Nov. 26, Dec. 28			wv	rare	wv	rare	
Chestnut-collared longspur								av	twice		to Feb. '89	14 Sept. '91					av		
Vesper sparrow	sr	ab	Apr. 5			Oct. 10	yes	sr, res	ab, oc	Mar. 25, Apr. 5, 13	Mar 19, 25, Apr. 10		Oct. 20, Nov. 5, 12	yes	sr	c	sr, wv	c, rare	Apr. 1
Ipswich sparrow								wv	fc, local			Oct. 12, 19, 23			wv, local		wv	c, local	
Savanna sparrow	sr	c	Apr. 28				yes	sr, res	c, fc	Mar. 29, Apr. 2, 10			Oct. 14, 22, Nov 15	yes	sr	c, local	res, tv	rare, ab	
Baird sparrow								av	once, 13 Nov. '99								av		
Grasshopper sparrow	sr	fc					yes	sr	fc	May 6, 9, 12			Sept. 22, Oct. 25	May 29, June 12	sr	c, local	sr	ab	Apr. 21
Henslow sparrow									once								tv, sr (?)	rare	
Leconte sparrow																			
Sharp-tailed sparrow																			
Nelson sparrow	tv	rare			Oct. 8	Oct. 17		sr, res	c, oc	Apr. 18, 29, May 8			Oct. 11, 17, Nov. 2	May 20, June 5	sr	c, local	sr, wv	c, oc	Apr. 28
Acadian sharp-tailed sparrow	tv	rare, once															tv		
Seaside sparrow																	tv	fc	
Lark sparrow								sr	ab	Apr. 22, May 2, 13					sr		sr	c	Apr. 27
White-crowned sparrow	tv	fc	May 5	May 25	Sept. 25	Oct. 5		av				July 28, Aug. 20	Sept. 21, Oct. 1, 17	May 23, 30, June 14	sr, local		av	4	
Gambel sparrow								tv	unc	Apr. 25, May 9		Sept. 26, Oct. 10	Nov. 27		tv	rare	tv	rare	Apr. 10
White-throated sparrow	tv, sr	c, local	May 1	May 25	Sept. 20	Oct. 5	yes	tv, wv	ab, fc	Feb. 24, Mar. 5, Apr. 12	May 1, 6, 20	Sept. 20, Oct. 11, 14	Oct. 16, 23, Nov. 17		tv, sr, wv	c; c, unc, local	tv, wv	ab, c	
Tree sparrow	tv, wv	ab, oc		May 5	Oct. 10			wv	ab		Apr. 3, 10, 22	Oct. 9, 16, Nov. 2	Nov. 23		wv	c	wv	ab	
Chipping sparrow	sr	ab	Apr. 15				yes	sr	ab	Feb. 17, Mar. 30, Apr 27					sr	ab	sr	c	Apr 1
Field sparrow	sr	c	Apr. 21				yes	sr, res	c, oc	Feb. 6, Mar. 20, Apr 17	Apr. 4, 13, May 5		Oct. 9, 26, Nov. 8	May 2, 20, June 15	sr	c, local	sr	c	Mar. 27
Slate-colored junco	tv, res	c, oc		May 10	Oct. 1		yes	tv, wv	ab, c				Oct. 26, Nov. 5, Dec. 21	May 14, June 21	wv, sr	c, c; local	wv	c	
Carolina junco											May 19	Sept. 23, 29, Oct. 12							
Song sparrow	sr, res	ab, rare	Mar. 25				yes	sr, res	ab, fc	Feb. 3, 22, Mar. 15				May 15, 19, 30	sr, res	ab, c, local	res	ab	
Lincoln sparrow	tv	once						tv	unc	May 9	Apr. 12, 30	Sept. 17, 28	Nov. 5, 26, Dec. 19		tv	rare	tv	rare	May 9
Swamp sparrow	sr	c	Apr. 20			Oct. 25, Dec. 1	yes	sr, res	fc, oc	Mar. 31, Apr. 12, 15			Oct. 8, 11, 16	June 4	sr, local		sr, tv, wv	unc, c, rare	Apr. 16
Fox sparrow	tv	c	Apr. 28	May 12	Oct. 8	Nov. 25		tv, wv	ab, unc	Feb. 22, Mar. 13, 22			Oct. 11, 20		tv	c	tv	c	Mar. 7
Towhee	sr	local					yes	sr	c	Apr. 16, May 5, 12		Oct. 12, 22, 24	Nov. 8, 22, Dec. 20	May 16, June 3, 20	sr	c	sr	c	Apr. 23
Cardinal								sv, res	unc, rare				Oct. 22, Nov. 4, 20	8 June '84	res, local		sr	rare	Apr. 11

SPECIES RECORDED	BRAISLIN, LONG ISLAND, 1907 (*continued*)				ALBA			
	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leav for nort
Barred owl		Nov. 27			wv, res	fc, rare		
Great gray owl								
Richardson owl								
Saw-whet owl				yes	wv	rare		
Screech owl					res	fc		
Great horned owl				yes	res, wv	unc, fc		
Snowy owl	Feb. 6	Nov. 7			wv	oc		
American hawk owl								
Burrowing owl								
Carolina paroquet					av	winter, 1795		
Yellow-billed cuckoo			Oct. 23	June 10	sr	fc	May 14	
Black-billed cuckoo			Oct. 3		sr	fc	May 14, 22	
Belted kingfisher			Nov. 7		sr	c	Apr. 10	
Hairy woodpecker				May 4	wv, res	unc, rare		
Downy woodpecker					res	fc		
Arctic three-toed woodpecker					wv	rare		
Am. three-toed woodpecker								
Yellow-bellied sapsucker	May 1	Sept. 25	Oct. 17		tv	c	Apr. 17, 20, 24	
North. pileated woodpecker					wv	rare		
Red-headed woodpecker			Sept. 27		tv, sr	unc, rare	Apr. 18, May 5	
Red-bellied woodpecker								
Northern flicker			Nov. 29	May 15	sr	c	Apr. 18, 20, 23	
Whip-poor-will			Sept. 22		sr	local		
Nighthawk			Oct. 12		tv, sr	fc, unc	May 15, 22	
Chimney swift			Oct. 6		sr	c	Apr. 26, 30	
Ruby-throated hummingbird			Sept. 17	May 20	sr	fc	May 16, 22	
Kingbird			Sept. 7	June 5	sr	c	May 10	
Gray kingbird								
Arkansas kingbird								
Crested flycatcher			Sept. 26	June 5	sr	fc	May 14, 20	
Phoebe			Oct. 26	May 25	sr	c	Apr. 10, 13	
Olive-sided flycatcher		Aug. 19	Sept. 26		sr, tv	rare, unc	May 13, 15	May 16
Wood pewee			Oct. 6	June 10	sr	c	May 23, 24	
Yellow-bellied flycatcher	June 10	Aug. 4	Sept. 18		tv	unc	May 21, 24, 26	May 31, June
Green-crested flycatcher			July 11	June 10		?		
Alder flycatcher					sr	unc	May 24	
Least flycatcher			Sept. 11		sr	fc	Apr. 30	
Skylark				yes				
Horned lark	Mar. 18	Nov. 7			wv	oc		
Hoyt horned lark								
Prairie horned lark		July 2, 31	Sept. 14		sr	fc		
Blue jay					res	fc		
Canada jay								
Northern raven	1848	1836						
American crow				Apr.	res	c		
Fish crow			Dec.					
Starling				yes				
Bobolink			Oct. 10		sr	c	May 6, 7	
Cowbird			Nov. 5		sr	fc		
Yellow-headed blackbird								
Red-winged blackbird			Nov. 6	May	sr	c	Mar. 23	
Meadowlark			Dec. 25		sr	c	Mar. 15	
Orchard oriole			July 18	June 5	sr	fc	May 13, 19, 25	
Baltimore oriole			Sept. 7	May 30	sr	c	May 2, 6, 7	
Bullock oriole								
Rusty blackbird	May 6	Oct. 5	Nov. 19		tv	fc		May 14
Purple grackle			Oct. 18	May	sr	c		
Bronzed grackle	June 16		Nov. 17		sr	c		
Evening grosbeak								
Pine grosbeak					wv	unc, 1904		
House sparrow					res	ab		
Chaffinch								
Greenfinch								
Purple finch					tv, wv	fc, rare	Apr. 10	
American crossbill	Apr. 23	Sept. 19		10 Apr. '83	wv	unc		Mar. 25
White-winged crossbill	Feb. 7	Nov. 7			wv	rare		
Hoary redpoll								
Redpoll					tv	fc		Mar. 24
Holboell redpoll					wv	rare		15 Feb. '07
Greater redpoll					wv	rare	15 Feb. '07	
European linnet								
American goldfinch				yes	sr	c	May 13	
Pine siskin	May 1	Oct. 16						
European goldfinch								
Snowflake	Mar. 18	Nov. 1			wv	fc		
Lapland longspur	Feb. 22				wv	Feb. '05		
Chestnut-collared longspur	16 Feb. '89							
Vesper sparrow			Nov. 23		sr	c	Apr. 13, 23	
Ipswich sparrow	Apr. 3		Oct. 12					
Savanna sparrow				yes	sr	c		
Baird sparrow		13 Nov. '99						
Grasshopper sparrow			Sept. 30	yes	sr	unc		
Henslow sparrow			20 Nov. '01		tv	rare		
Leconte sparrow								
Sharp-tailed sparrow			Oct 23					
Nelson sparrow		5 Oct. '07						
Acadian sharp-tailed sparrow		Oct. 7						
Seaside sparrow			Sept. 30					
Lark sparrow		July 28, Aug. 20	Nov. 27					
White-crowned sparrow	May 30	Oct. 16	Oct. 21		tv	unc	May 9	
Gambel sparrow								
White-throated sparrow	May 20	Sept. 22			tv	c	Apr. 26, 28	May 14
Tree sparrow	Mar 30	Nov 5			wv			
Chipping sparrow			Oct. 26	June 15	sr	c	Apr. 26, 27	
Field sparrow			Oct. 26	June	sr	fc	Apr. 29	
Slate-colored junco	May 5	Sept. 26			tv	c	Apr. 5, 20	May 5
Carolina junco								
Song sparrow				Apr. 22	sr, res	ab, oc	Mar. 22	
Lincoln sparrow	May 12	Sept. 9	Nov. 29					
Swamp sparrow			Nov. 17		tv, sr	fc, oc	Apr. 26	
Fox sparrow	Apr. 18	Oct. 14	Dec. 25		tv	fc	Mar. 28, 31	
Towhee			Oct. 23	yes	sr	c, local	May 3, 7	
Cardinal			Sept. 7, Dec. 1					

			ALLEGANY				BROOME				
s	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Breeds
			res	c		yes	res	oc			
				rare			res	oc			yes
			res	c		yes	res	c			yes
			res	fc		yes	res	oc			yes
			wv	oc			wv	oc			
		yes	sr	c	May 11, 18	yes	sr	c	May 14		yes
		June 15, July 14	sr	c	May 11, 18	yes	sr	c	May 6, 10		yes
	Nov. 11, Dec. 11	yes	sr	c	Mar. 31, Apr. 10	yes	sr	c	Apr. 18		yes
			res	c		yes	res	c			yes
		yes	res	c		yes	res	ab			yes
	Oct. 3, 20		tv	fc	Apr. 16, 20		sr	fc	Apr. 17, 20		yes
			res	rare		yes					
	Sept. 24		sr	fc	May 6, 10	yes	sr, res	c, oc			yes
				rare				rare, 1888			yes
		yes	sr	ab	Mar. 28, Apr. 8	yes	sr	ab	Mar. 21, Apr. 3		yes
		yes	sr	rare			sr	rare			yes
	Sept. 8, 15	June 15	sr	fc	May 24	yes	sr	c	May 11, 12		yes
		yes	sr	ab	Apr. 29, May 2	yes	sr	ab	Apr. 25, 29		yes
	Aug. 28	yes	sr	c	May 12, 13	yes	sr	c	May 4, 8		yes
	Aug. 21	yes	sr	c	May 2, 6	yes	sr	c	May 3, 6		yes
		yes	sr	c	May 5, 8	yes	sr	fc	May 12, 14		yes
		yes	sr	c	Mar. 26, Apr. 5	yes	sr	c	Mar. 18, 27		yes
		1904, C. K. Hall					tv	oc	May 15, 17		
	Sept. 8	yes	sr	c	May 13	yes	sr	c	May 17		yes
			tv	rare	May 18		tv	fc	May 13	May 27	
								oc			
	Aug.	yes					tv	oc	June 6		
		yes	sr	ab	May 2, 4	yes	sr	c	Apr. 29, May 5		yes
		Mar. 28	sr	c	Feb. 7, 10	yes	sr	c	Feb., Mar. 6		yes
		yes	res	unc		yes	res	c			yes
		yes	sr	ab		yes	res	ab			yes
		yes	sr	c	May 4, 8	yes	sr	c	May 1, 8		yes
		yes	sr	c	Mar. 26, Apr. 2	yes	sr	c	Apr. 12		yes
		yes	sr	c	Mar. 15, 20	yes	sr	c	Mar. 2, 13		yes
		yes	sr	c	Mar. 19, Apr. 1	yes	sr	c	Mar. 13, 19		yes
		June 2					sr	unc	May 28		yes
	Sept. 5	yes	sr	c	May 1, 3	yes	sr	c	May 4, 5		yes
	Nov. 2		tv				tv	oc	Apr. 2, 20		
		yes									
	Nov. 6	yes	sr	c	Mar. 18, 25	yes	sr	ab	Mar. 12, 19		yes
								21 Nov. '99			
							wv	oc			
		yes	res	ab		yes	res	ab			yes
	Oct., Nov. 15		sr	c	Mar. 24, 29	yes	sr, res	c, oc	Mar. 15, 28		yes
			wv	oc			wv	oc	Mar. 9	May 16	
			wv	rare			wv	rare	Mar. 25	Mar. 27	
			wv	rare			wv	fc		Apr. 5	
		yes	sr	c	Mar. 26, Apr. 1	yes	sr, res	ab, c	Mar. 9, 15		yes
			wv	oc	5 May '75				Apr. 19		
			wv	c			wv	oc			
			wv	rare			wv	rare			
		yes	sr	ab	Mar. 26, Apr. 1	yes	sr	ab	Mar. 18, Apr. 5		yes
		yes	sr	c	Apr. 4, 10	yes	sr	c	Mar. 25		yes
							sr	local			yes
								rare	Apr. 10, 12		
			tv	fc	May 9		tv	c	May 9, 11	May 16	
	Oct. 24		tv	c	Apr. 27, May 4		tv	ab	Apr. 14, 23	May 3, 11	
			wv	fc			wv	ab			
		yes	sr	ab	Mar. 31, Apr. 12	yes	sr	ab	Apr. 3, 5		yes
		June 15	sr	c	Mar. 29, Apr. 12	yes	sr	c	Mar. 30, Apr. 12		yes
			tv, sr	ab, oc	Mar. 17, Apr. 1	yes	tv, sr	ab, oc	Mar. 2, 15	Apr. 28	rarely
		yes	sr	ab	Feb. 27, Mar. 5, 20	yes	sr, res	ab, oc	Mar. 3, 15		yes
			tv	rare			tv	rare			
			sr	local			tv, sr	fc, oc	Apr. 2, 20		yes
			tv	unc			tv	fc	Mar. 24		
		May 27	sr	c	Apr. 16, 25	yes	sr	c	Apr. 20, 30		yes

SPECIES RECORDED	BRAISLIN, LONG ISLAND, 1907 (*continued*)				ALBANY							ALLEGANY				BROOME				
	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Breeds
Barred owl		Nov. 27			wv, res.	fc, rare.						res.	c.		yes	res.	oc			
Great gray owl																				
Richardson owl																				
Saw-whet owl				yes	wv	rare			Dec. '05				rare			res	oc			yes
Screech owl					res	fc						res	c.		yes	res	c			yes
Great horned owl				yes	res, wv	unc, fc						res	fc		yes	res	oc			yes
Snowy owl	Feb 6.	Nov. 7			wv	oc						wv	oc			wv	oc			
American hawk owl																				
Burrowing owl																				
Carolina paroquet					av	winter, 1795														
Yellow-billed cuckoo			Oct 23	June 10	sr	fc	May 14				yes	sr	c	May 11, 18	yes	sr	c	May 14		yes
Black-billed cuckoo			Oct. 3.		sr	fc	May 14, 22				June 15, July 14	sr	c	May 11, 18	yes	sr	c	May 6, 10		yes
Belted kingfisher			Nov. 7		sr	c	Apr. 10			Nov. 11, Dec 11	yes	sr	c	Mar. 31, Apr 10.	yes	sr	c	Apr. 18.		yes
Hairy woodpecker				May 4	wv, res	unc, rare.						res	c		yes	res	c			yes
Downy woodpecker					res	fc					yes	res	c		yes	res.	ab.			yes
Arctic three-toed woodpecker					wv	rare														
Am. three-toed woodpecker						c														
Yellow-bellied sapsucker	May 1	Sept. 25	Oct 17.		tv	c	Apr. 17, 20, 24		Sept 8.	Oct 3, 20		tv	fc	Apr. 16, 20		sr	fc	Apr 17, 20.		yes
North. pileated woodpecker					wv	rare						res.	rare		yes					
Red-headed woodpecker			Sept. 27.		tv, sr.	unc, rare	Apr. 18, May 5			Sept. 24		sr	fc	May 6, 10	yes	sr, res.	c, oc.			yes
Red-bellied woodpecker													rare				rare, 1888.			yes
Northern flicker			Nov. 20	May 15.	sr	c	Apr. 18, 20, 23				yes	sr	ab	Mar. 28, Apr. 8	yes	sr	ab	Mar 21, Apr. 3.		yes
Whip-poor-will			Sept. 22.		sr	local					yes	sr	rare			sr	rare			yes
Nighthawk			Oct 12		tv, sr	fc, unc	May 15, 22		Aug. 18	Sept. 8, 15.	June 15	sr	fc	May 24	yes	sr	c	May 11, 12		yes
Chimney swift			Oct 6		sr	c	Apr. 26, 30				yes	sr	ab.	Apr. 29, May 2	yes	sr	ab.	Apr. 25, 29		yes
Ruby-throated hummingbird			Sept 17	May 20	sr	fc	May 16, 22			Aug. 28	yes	sr	c	May 12, 13	yes	sr.	c	May 4, 8.		yes
Kingbird			Sept. 7	June 5	sr	c	May 10			Aug. 21	yes	sr.	c	May 2, 6	yes	sr	c	May 3, 6.		yes
Gray kingbird																				
Arkansas kingbird																				
Crested flycatcher			Sept 26.	June 5	sr.	fc	May 14, 20				yes	sr.	c	May 5, 8	yes	sr	fc	May 12, 14		yes
Phoebe			Oct 26	May 25.	sr.	c	Apr. 10, 13				yes	sr	c	Mar. 26, Apr. 5.	yes	sr	c	Mar. 18, 27.		yes
Olive-sided flycatcher		Aug. 19	Sept. 26.		sr, tv	rare, unc	May 13, 15	May 16.			1904, C. K. Hall.					tv	oc	May 15, 17.		
Wood pewee			Oct 6	June 10	sr	c	May 23, 24			Sept. 8.	yes	sr	c	May 13	yes	sr	c	May 17		yes
Yellow-bellied flycatcher	June 10	Aug. 4	Sept. 18		tv	unc	May 21, 24, 26	May 31, June 2, 7	Aug. 25			tv.	rare	May 18		tv	fc	May 13	May 27	
Green-crested flycatcher			July 11	June 10		?											oc			
Alder flycatcher					sr.	unc	May 24			Aug.	yes					tv	oc	June 6		
Least flycatcher			Sept 11.		r	fc	Apr. 30				yes	sr.	ab	May 2, 4	yes.	sr.	c	Apr. 29, May 5		yes
Skylark				yes																
Horned lark	Mar. 18	Nov. 7.			wv	oc														
Hoyt horned lark																				
Prairie horned lark		July 2, 31	Sept 14		sr	fc					Mar. 28	sr	c	Feb. 7, 10	yes	sr	c	Feb., Mar 6.		yes
Blue jay					res	fc					yes	res	unc		yes	res	c			yes
Canada jay																				
Northern raven	1848	1836.																		
American crow				Apr.	res	c					yes.	sr	ab.		yes	res	ab.			yes
Fish crow			Dec.																	
Starling				yes																
Bobolink			Oct 10		sr	c	May 6, 7				yes	sr	c	May 4, 8	yes	sr	c	May 1, 8		yes
Cowbird			Nov. 5		sr	fc					yes	sr	c	Mar. 26, Apr. 2	yes	sr	c	Apr 12		yes
Yellow-headed blackbird																				
Red-winged blackbird			Nov. 6.	May	sr.	c	Mar. 23				yes	sr	c	Mar. 15, 20	yes	sr	c	Mar. 2, 11		yes
Meadowlark			Dec. 25		sr	c	Mar. 15				yes	sr	c.	Mar. 19, Apr 1.	yes	sr	c	Mar 13, 19		yes
Orchard oriole			July 18	June 5	sr.	fc	May 13, 19, 25				June 2					sr	unc.	May 28		yes
Baltimore oriole			Sept. 7	May 30	sr.	c	May 2, 6, 7			Sept. 5	yes	sr	c	May 1, 3	yes	sr	c.	May 4, 5		yes
Bullock oriole																				
Rusty blackbird	May 6	Oct 5	Nov. 19		tv	fc		May 14		Nov. 2		tv				tv	oc	Apr. 2, 20		
Purple grackle			Oct. 18	May	sr	c					yes									
Bronzed grackle	June 16		Nov. 17		sr.	c				Nov 6	yes	sr	c	Mar. 18, 25	yes	sr	ab	Mar. 12, 19		yes
Evening grosbeak																	21 Nov. '99			
Pine grosbeak					wv	unc, 1904										wv	oc			
House sparrow					res	ab.					yes	res	ab.		yes	res	ab.			yes
Chaffinch																				
Greenfinch																				
Purple finch										Oct., Nov. 15		sr	c	Mar. 24, 29	yes.	sr, res	c, oc	Mar. 15, 28		yes
American crossbill	Apr. 23	Sept. 19		10 Apr. '83	tv, wv	fc, rare	Apr. 10					wv	oc			wv	c	Mar 9	May 10	
White-winged crossbill	Feb. 7.	Nov. 7.			wv	unc		Mar. 25				wv	rare			wv	rare	Mar 25	Mar 27	
Hoary redpoll					wv	rare			Nov. 17											
Redpoll																				
Holboell redpoll					tv	fc		Mar 24.	Jan. 13			wv	rare			wv	fc		Apr 5	
Greater redpoll					wv	rare		15 Feb. '07												
European linnet					wv	rare	15 Feb. '07													
American goldfinch																				
Pine siskin	May 1	Oct 16		yes	sr.	c	May 13				yes	sr.	c.	Mar 20, Apr 1.	yes	sr, res	ab, c.	Mar 9, 15		yes
European goldfinch												wv	oc	5 May '75				Apr 10		
Snowflake	Mar. 18	Nov. 1																		
Lapland longspur	Feb 22				wv	fc						wv				wv	oc			
Chestnut-collared longspur	16 Feb. '89				wv	Feb. '05						wv	rare			wv	rare			
Vesper sparrow																				
Ipswich sparrow	Apr. 3		Nov. 23.																	
Savanna sparrow			Oct 12.		sr.	c	Apr. 13, 23				yes	sr	ab.	Mar. 26, Apr. 1.	yes	sr	ab	Mar 18, Apr 5.		yes
Baird sparrow		13 Nov '09		yes																
Grasshopper sparrow					sr	c					yes	sr	c	Apr. 4, 10	yes	sr	c	Mar 25		yes
Henslow sparrow			Sept 30	yes																
Leconte sparrow			20 Nov. '01		sr	unc										sr	local			yes
Sharp-tailed sparrow					tv	rare											rare	Apr 10, 12		
Nelson sparrow			Oct 23																	
Acadian sharp tailed sparrow		5 Oct '07																		
Seaside sparrow		Oct 7																		
Lark sparrow			Sept. 30																	
White-crowned sparrow	May 30	July 28, Aug 20	Nov. 27																	
Gambel sparrow		Oct. 16	Oct 21																	
White-throated sparrow	May 20	Sept 22			tv.	unc	May 9					tv	fc	May 9		tv	c	May 9, 11	May 16.	
Tree sparrow	Mar 30	Nov 5																		
Chipping sparrow					tv	c	Apr. 26, 28	May 14		Oct. 24		tv	c	Apr 27, May 4		tv	ab	Apr. 14, 23	May 1, 11	
Field sparrow			Oct 26		wv							wv	fc			wv	ab			
Slate-colored junco	May 5	Sept. 26.	Oct 26.	June 15	sr	c	Apr. 26, 27				yes	sr	ab.	Mar 31, Apr. 12	yes	sr	ab.	Apr 3, 5		yes
Carolina junco				June.	sr	fc	Apr. 29				June 15	sr		Mar 29, Apr 12.	yes	sr	c	Mar 30, Apr 12.		yes
Song sparrow					tv	c	Apr. 5, 26	May 5				tv, sr	ab, oc	Mar. 17, Apr 1.	yes	tv, sr	ab, oc.	Mar 2, 15	Apr 28	rarely.
Lincoln sparrow	May 12	Sept. 9		Apr 22																
Swamp sparrow			Nov 29		sr, res.	ab, oc	Mar. 22				yes	sr	ab.	Feb. 27, Mar. 5, 20	yes	sr, res	ab, oc.	Mar 1, 15		yes
Fox sparrow	Apr. 18	Oct. 14	Nov. 17									tv	rare			tv	rare			
Towhee			Dec. 25		tv, sr	fc, oc	Apr. 26					sr	local			tv, sr	fc, oc	Apr. 2, 20		yes
Cardinal			Oct 23.	yes	tv	fc	Mar. 28, 31					tv	unc			tv	fc	Mar 24		
			Sept 7, Dec. 1		sr	c, local	May 3, 7					sr	c	Apr 10, 15	yes	sr	c	Apr. 20, 30		yes

SPECIES RECORDED	CATTARAUGUS					CAYUGA				
	Resident or transient	Common or rare	Arrives from south	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north
Barred owl	res.	oc.			yes	res.	unc.			
Great gray owl										
Richardson owl										
Saw-whet owl						wv.	rare.			
Screech owl	res.	c.			yes	res.	c.			
Great horned owl	res.	unc.				res.	fc.			
Snowy owl	wv.	oc.				wv.	oc.			
American hawk owl						wv.	rare.			27 Nov. '02
Burrowing owl										
Carolina paroquet										
Yellow-billed cuckoo	sr.	fc.	May		yes	sr.	unc.	May 10, 14		
Black-billed cuckoo	sr.	fc.	May 13		yes	sr.	fc.	May 19, 22		
Belted kingfisher	sr.	c.	Apr. 24		yes	sr.	c.	Apr. 18, 22		
Hairy woodpecker	res.	c.			yes	res.	fc.			
Downy woodpecker	res.	c.			yes	res.	c.			
Arctic three-toed woodpecker						wv.	rare.			19 Oct. '01
Am. three-toed woodpecker										
Yellow-bellied sapsucker	tv.	unc.				tv, sr.	fc, rare	Apr. 15, 18	Apr. 30	Sept. 27
North. pileated woodpecker	res.	rare.					rare, 1897			
Red-headed woodpecker	sr.	c.	May 6		yes	sr.	fc.	Apr. 16, May 10		
Red-bellied woodpecker		rare.				res.	rare.	4 Mar. '98		
Northern flicker	sr.	ab.	Apr.	Nov. 1	yes	sr.	ab.	Apr. 2, 12		
Whip-poor-will	sr.	rare.				sr.	fc.			
Nighthawk	sr.	unc.	May 8, 24	Sept. 15	yes	tv, sr.	fc, unc		June 3	Aug. 25
Chimney swift	sr.	c.	Apr. 30		yes	sr.	ab.	Apr. 18, 24		
Ruby-throated hummingbird	sr.	fc.	May 12, 14	Sept. 12	yes	sr.	c.	May 10, 14		
Kingbird	sr.	c.	May 6, 9		yes	sr.	c.	Apr. 30, May 5		
Gray kingbird										
Arkansas kingbird										
Crested flycatcher	sr.	fc.	May 8		yes	sr.	fc.	May 6, 9		
Phoebe	sr.	c.	Apr. 5	Oct. 18	yes	sr.	c.	Mar. 27, Apr. 6		
Olive-sided flycatcher						tv.	oc.	30 May, '98		
Wood pewee	sr.	ab.	May 18	Sept. 10	yes	sr.	c.	May 9, 15		
Yellow-bellied flycatcher						tv.	fc.	May 5, 17	May 29, June 9	
Green-crested flycatcher						sr.	rare.	May 23		
Alder flycatcher						sr.	unc.	May 14, 28		
Least flycatcher	sr.	c.	May 5		yes	sr.	c.	Apr. 20, May 3, 5		
Skylark										
Horned lark						wv.				
Hoyt horned lark										
Prairie horned lark	sr.	c.			yes	sr, wv.	c, unc.	Jan. 21, Feb. 5, 15		
Blue jay	res.	c.			yes	res.	fc.			
Canada jay										
Northern raven						av.				1880
American crow	res.	c.			yes	res.	ab.			
Fish crow										
Starling										
Bobolink	sr.	c.	May 3, 10		yes	sr.	c.	May 2, 8		
Cowbird	sr.	c.	Apr. 1		yes	sr.	c.	Apr. 6, 10		
Yellow-headed blackbird										
Red-winged blackbird	sr.	c.	Mar. 13		yes	sr.	ab.	Mar. 16, 20		
Meadowlark	sr.	c.	Mar. 28		yes	sr, res.	c, rare	Mar. 12, 25		
Orchard oriole						sr.	rare.	May 20		
Baltimore oriole	sr.	c.	May 3, 5		yes	sr.	c.	May 2, 3		
Bullock oriole										
Rusty blackbird	tv.	fc.				tv.	c.			
Purple grackle										
Bronzed grackle	sr.	c.	Mar. 10		yes	sr.	ab.	Mar. 16, 20		
Evening grosbeak						wv.			Mar. '90	Jan., Dec. 8
Pine grosbeak						wv.	oc.		Apr. 18	
House sparrow	res.	ab.			yes	res.	ab.			
Chaffinch										
Greenfinch										
Purple finch	sr.	fc.	Apr. 5		yes	sr.	c.	Mar. 30, Apr. 5		
American crossbill						wv.	oc.		15 May, '99	
White-winged crossbill						wv.	rare.		5 Feb. '96	24, Dec. '78, 4 J
Hoary redpoll						av.	once			
Redpoll						wv.	oc.			
Holboell redpoll										
Greater redpoll										
European linnet										
American goldfinch	sr.	ab.			yes	sr, res.	ab, fc			
Pine siskin						wv.	oc.		13 Apr. '99, May 30	Jan. 20, Feb. 22
European goldfinch										
Snowflake	wv.	oc.				wv.	ab.		Mar.	Sept. 28, Oct. 2
Lapland longspur						wv.	rare.		3 Mar. '99	
Chestnut-collared longspur										
Vesper sparrow	sr.	c.			yes	sr.	c.	Apr. 5, 7		
Ipswich sparrow										
Savanna sparrow	sr.	fc.			yes	sr.	c.	Mar. 29, Apr. 10		
Baird sparrow										
Grasshopper sparrow						sr.	c.	May 5, 10		
Henslow sparrow										
Leconte sparrow										
Sharp-tailed sparrow										
Nelson sparrow						tv.	oc.			Sept. 28
Acadian sharp-tailed sparrow						tv.	unc.			Oct. 1
Seaside sparrow										
Lark sparrow										
White-crowned sparrow	tv.	oc.	May 16			tv.	c.	Apr. 29, May 5	May 22	
Gambel sparrow										
White-throated sparrow	tv.	c.				tv.	c.	Apr. 20, 30	May 16	Sept. 25
Tree sparrow	wv.	fc.				wv.	c.		Apr. 23, 30	Oct. 18, 30
Chipping sparrow	sr.	c.			yes	sr.	ab.	Mar. 30, Apr. 15		
Field sparrow	sr.	fc.			yes	sr.	c.	Mar. 28, Apr. 15		
Slate-colored junco	tv, sr.	c, oc.			yes	wv, tv, sr.	fc, ab, local	Mar. 19, Apr. 3		
Carolina junco										
Song sparrow	sr.	ab.	Mar. 10		yes	sr, res.	ab, unc.	Feb. 24, Mar. 10, 25		
Lincoln sparrow						tv.	rare.	May 14		Oct. 6
Swamp sparrow						sr, wv.	c, oc.	Apr. 13, 20		
Fox sparrow	tv.	unc.				tv.	fc.	Mar. 29, Apr. 15	Apr. 23, May 3	Oct. 8
Towhee	sr.	c.			yes	tv, sr.	fc, oc.	Apr. 30	May 3	
Cardinal										

		CHAUTAUQUA					CHEMUNG				
rts h	Breeds	Resident or transient	Common or rare	Arrives from south	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Departs for south	Breeds
	yes	res	fc			yes					
			rare								
	yes	res	fc				res	c			
	yes	res	fc				res				
		wv	rare								
	yes	sr	unc	May 15	Oct	yes	sr		May 18		yes
	May 30, June 10	sr	c	May 7		yes	sr		May 8, 20		
	May 10	sr	ab				sr	c	Apr. 13, 16		yes
	yes	res	fc			yes	res	unc			yes
	yes	res	c			yes	res	c			yes
		av	29 Dce. '84								
	May 25	tv, sr	c, oc				tv	fc	Apr. 3, 7		
	yes	sr	fc								
	yes	tv	oc								
	yes	sr	c	Apr. 15		yes	sr	c	Mar. 30, Apr. 10		yes
	yes	sr	oc	Apr.	Oct.	yes	sr	c	May 2		yes
	yes	tv	oc	May 10			sr	c	May 12, 15		yes
	yes	sr	c			yes	sr	c	Apr. 28, 30		yes
	yes	sr	c	May 7, 10		yes	sr		May 13		yes
	yes	sr	ab	Apr. 28		yes	sr	c	May 3, 5		yes
	yes	sr	unc	May 14		yes	sr	c	May 2		yes
	yes	sr	ab	Apr. 1, 10		yes	sr	c	Mar. 28, Apr. 5		yes
	yes	sr	c	May 7		yes	sr	c	May 15		yes
		tv		May 20	Sept. 10		tv				
	July 4	sr	rare, local								
	yes										
	yes	sr	c	May 10		yes	sr	c	May 3		yes
	yes	sr	fc			yes	sr		Feb. 4, 12		
		res	fc			yes	res	fc			yes
		av	1861								
	yes	res	ab			yes	res	c			yes
	yes	sr	ab	May 5		yes	sr	ab	May 6, 8		yes
	yes	sr	c	Apr. 1		yes	sr	c	Mar. 17		yes
	yes	sr	ab	Mar. 20		yes	sr	c	Mar. 12, 17		yes
	yes	sr	c	Mar. 1, 12		yes	sr	c	Mar. 25		yes
	27 May, '99	sr	rare	May 2, 14		yes	sr	unc	May 13		
	yes	sr	c	May 2, 5		yes	sr	c	May 1, 3		yes
		tv	fc				tv		Mar. 26		
	yes	sr	ab	Mar. 29		yes	sr	c	Mar. 10, 17		yes
							av				
		wv	oc								
	yes										
	yes	sr	fc	Mar. 26, Apr. 10		yes	sr	c	Apr. 19		yes
		wv	oc				wv	oc	13 June '01		
		wv	oc								
		wv	oc				wv	oc			
	yes	sr	c			yes	sr, res	c, fc			yes
		wv			Oct. 1						
		wv	oc				wv	oc			
	yes	sr	c	Apr. 1	Nov	yes	sr	c	Mar. 26, Apr. 5	Nov. 5	yes
	yes										
	yes	sr		May 3		yes	sr		May		yes
		tv		May 2, 6	Oct. 10		tv		May 5, 7		
		tv	fc		Sept. 30		tv	c	Apr. 20, 30		
		wv	c				wv	c			
	yes	sr	ab	Apr. 13		yes	sr	c	Mar. 30, Apr. 10		yes
	yes	sr	c	Apr. 20		yes	sr	c	Mar. 28, Apr. 10		yes
	yes	wv, sr	c, oc			yes	tv	c	Mar. 22	Oct. 17, Nov. 15	?
	yes	sr	ab	Mar. 14, 20		yes	sr	c	Feb. 22, Mar. 8	Nov. 26	yes
	yes	sr	unc			yes					
		tv	unc	Mar. 20	Nov. 3						
		sr	fc	Apr. 20		yes	sr	c	Apr. 21, 30		yes
			rare			yes					

SPECIES RECORDED	CATTARAUGUS					CAYUGA							CHAUTAUQUA					CHEMUNG				
	Resident or transient	Common or rare	Arrives from south	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Departs for south	Breeds
Barred owl	res	[illegible]			yes	res	unc					yes	res	fc			yes					
Great gray owl																						
Richardson owl																						
Saw-whet owl						wv	rare							rare								
Screech owl	res	c			yes	res	c					yes	res	fc								
Great horned owl	res	unc				res	fc					yes	res	fc				res				
Snowy owl	wv	oc				wv	oc						wv	rare								
American hawk owl						wv	rare			27 Nov. '02												
Burrowing owl																						
Carolina paroquet																						
Yellow-billed cuckoo	sr	fc	May		yes	sr	unc	May 10, 14				yes	sr	unc	May 15	Oct	yes	sr		May 18		
Black-billed cuckoo	sr	fc	May 13		yes	sr	fc	May 10, 22				May 30, June 10	sr	c	May 7		yes	sr		May 8, 20		yes
Belted kingfisher	sr	c	Apr. 24		yes	sr	c	Apr. 18, 22			Oct. 20	May 10	sr	ab				sr	c	Apr. 13, 16		
Hairy woodpecker	res	c			yes	res	fc					yes	res	fc			yes	res	unc			yes
Downy woodpecker	res	c			yes	res	c					yes	res	c			yes	res	c			yes
Arctic three-toed woodpecker						wv	rare			19 Oct. '01			av	29 Dec. '84								yes
Am. three-toed woodpecker																						
Yellow-bellied sapsucker	tv	unc				tv, sr	fc, rare	Apr. 15, 18	Apr. 30	Sept. 27		May 25	tv, sr	c, oc				tv	fc	Apr. 3, 7		
North. pileated woodpecker	res	rare					rare, 1897															
Red-headed woodpecker	sr	c	May 6		yes	sr	fc	Apr. 16, May 10			Sept. 28	yes	sr	fc								
Red-bellied woodpecker		rare				res	rare	4 Mar. '98				yes	tv	oc								
Northern flicker	sr	ab	Apr	Nov. 1	yes	sr	ab	Apr. 2, 12			Oct. 20	yes	sr	c	Apr. 15		yes	sr	c	Mar. 30, Apr. 10		
Whip-poor-will	sr	rare				sr	fc					yes	sr	oc	Apr	Oct	yes	sr	c	May 2		yes
Nighthawk	sr	unc	May 8, 24	Sept. 15	yes	tv, sr	fc, unc		June 3	Aug. 25	Sept. 5	yes	tv	oc	May 10			sr	c	May 12, 15		yes
Chimney swift	sr	c	Apr. 30		yes	sr	ab	Apr. 18, 24			Sept	yes	sr	c			yes	sr	c	Apr. 28, 30		yes
Ruby-throated hummingbird	sr	fc	May 12, 14	Sept 12	yes	sr	c	May 10, 14			Aug. 15	yes	sr	c	May 7, 10		yes	sr		May 13		yes
Kingbird	sr	c	May 6, 9		yes	sr	c	Apr. 30, May 5				yes	sr	ab	Apr. 28		yes	sr	c	May 3, 5		yes
Gray kingbird																						
Arkansas kingbird																						
Crested flycatcher	sr	fc	May 8		yes	sr	fc	May 6, 9				yes	sr	unc	May 14		yes	sr	c	May 2		yes
Phoebe	sr	c	Apr. 5	Oct. 18	yes	sr	c	Mar. 27, Apr. 6			Oct. 10	yes	sr	ab	Apr. 1, 10		yes	sr	c	Mar. 28, Apr. 5		yes
Olive-sided flycatcher						tv	oc	30 May, '98														
Wood pewee	sr	ab	May 18	Sept. 10	yes	sr	c	May 9, 15			Sept. 27	yes	sr	c	May 7		yes	sr	c	May 15		yes
Yellow-bellied flycatcher						tv	fc	May 5, 17	May 29, June 9				tv		May 20	Sept. 10		tv				
Green-crested flycatcher						sr	rare	May 23			Aug	July 4	sr	rare, local								
Alder flycatcher						sr	unc	May 14, 28				yes										
Least flycatcher	sr	c	May 5		yes	sr	c	Apr. 20, May 3, 5			Sept. 27	yes	sr	c	May 10		yes	sr	c	May 3		yes
Skylark																						
Horned lark						wv																
Hoyt horned lark																						
Prairie horned lark	r				yes	sr, wv	c, unc	Jan. 21, Feb. 5, 15			Nov. 19	yes	sr	fc			yes	sr		Feb 4, 12		
Blue jay	res	c			yes	res	fc						res	fc			yes	res	fc			yes
Canada jay																						
Northern raven						av				1880			av	1861								
American crow	res	c			yes	res	ab					yes	res	ab			yes	res	c			yes
Fish crow																						
Starling																						
Bobolink	sr	c	May 3, 10		yes	sr	c	May 2, 8				yes	sr	ab	May 5		yes	sr	ab	May 6, 8		yes
Cowbird	sr		Apr. 1		yes	sr	c	Apr. 6, 10				yes	sr	c	Apr. 1		yes	sr	c	Mar. 17		yes
Yellow-headed blackbird																						
Red-winged blackbird	sr	c	Mar. 13		yes	sr	ab	Mar. 16, 20			Oct. 18	yes	sr	ab	Mar. 20		yes	sr	c	Mar. 12, 17		yes
Meadowlark	sr	c	Mar. 28		yes	sr, res	c, rare	Mar. 12, 25			Oct. 30	yes	sr	c	Mar. 1, 12		yes	sr	c	Mar. 25		yes
Orchard oriole						sr	rare	May 20			Aug	27 May, '99	sr	rare	May 2, 14		yes	sr	unc	May 13		
Baltimore oriole	sr		May 3, 5		yes	sr	c	May 2, 3				yes	sr	c	May 2, 5		yes	sr	c	May 1, 3		yes
Bullock oriole																						
Rusty blackbird	tv	fc				tv	c				Oct. 20		tv	fc				tv		Mar. 26		
Purple grackle																						
Bronzed grackle	r	c	Mar. 10		yes	sr	ab	Mar. 16, 20			Oct. 20	yes	sr	ab	Mar. 29		yes	sr		Mar. 10, 17		yes
Evening grosbeak						wv			Mar. '90	Jan., Dec. 8								av				
Pine grosbeak						wv	oc		Apr. 18				wv	oc								
House sparrow	res	ab			yes	res	ab					yes										
Chaffinch																						
Greenfinch																						
Purple finch	sr	fc	Apr. 5		yes	sr	c	Mar. 30, Apr. 5				yes	sr	fc	Mar. 26, Apr. 10		yes	sr	c	Apr. 19		yes
American crossbill						wv	oc		15 May, '99				wv	oc				wv	oc	13 June '01		
White-winged crossbill						wv	rare		5 Feb. '96	24, Dec. '78, 4 Jan. '07			wv	oc								
Hoary redpoll						av	once															
Redpoll						wv	oc						wv	oc				wv	oc			
Holbœll redpoll																						
Greater redpoll																						
European linnet																						
American goldfinch	sr	ab																				
Pine siskin					yes	sr, res	ab, fc															
European goldfinch						wv	oc		13 Apr. '99, May 30	Jan. 20, Feb. 22		yes	sr				yes	sr, res	c, fc			yes
Snowflake	wv	oc											wv			Oct. 1						
Lapland longspur						wv	ab		Mar	Sept. 28, Oct. 29			wv	oc				wv	oc			
Chestnut-collared longspur						wv	rare		3 Mar. '99													
Vesper sparrow	r																					
Ipswich sparrow					yes	sr	c	Apr. 5, 7			Oct. 18	yes	sr		Apr. 1	Nov	yes	sr	c	Mar 26, Apr. 5	Nov. 5	yes
Savanna sparrow	sr	fc																				
Baird sparrow					yes	sr	c	Mar. 29, Apr. 10			Oct. 30	yes										
Grasshopper sparrow																						
Henslow sparrow						sr	c	May 5, 10			Aug. 8	yes	sr		May 3		yes	sr		May		yes
Leconte sparrow																						
Sharp-tailed sparrow																						
Nelson sharp-tailed sparrow																						
Acadian sharp-tailed sparrow						tv	oc			Sept. 28	Oct. 1											
Seaside sparrow						tv	unc			Oct. 1	Oct. 12											
Lark sparrow																						
White-crowned sparrow	tv	oc	May 16																			
Gambel sparrow						tv	c	Apr. 29, May 5	May 22				tv		May 2, 6	Oct 10		tv		May 5, 7		
White-throated sparrow	tv																					
Tree sparrow	wv	fc				tv	c	Apr. 20, 30	May 16	Sept. 25			tv	fc		Sept. 30		tv	c	Apr. 10, 10		
Chipping sparrow	sr	c				wv	c		Apr. 23, 30	Oct. 18, 30			wv	c				wv	c	Mar. 30, Apr. 10		yes
Field sparrow	sr	fc			yes	sr	ab	Mar. 30, Apr. 15			Oct 18	yes	sr	ab	Apr. 13		yes	sr	c	Mar 28, Apr 10		yes
Slate-colored junco	tv, sr	c, oc			yes	sr	c	Mar. 28, Apr 15			Oct. 20	yes	sr	c	Apr. 20		yes	tv	c	Mar 22	Oct 17, Nov. 15	
Carolina junco					yes	wv, tv, sr	fc, ab, local	Mar. 10, Apr. 3				yes	wv, sr	c, oc			yes					
Song sparrow	sr	ab	Mar. 10								Oct. 20							sr	c	Feb. 22, Mar. 8	Nov. 26	yes
Lincoln sparrow					yes	sr, res	ab, unc	Feb 24, Mar. 10, 25				yes	sr	ab	Mar. 14, 20		yes					
Swamp sparrow						tv	rare	May 14		Oct. 6	Oct 30											
Fox sparrow	tv	unc				sr, wv	oc	Apr. 13, 20			Nov. 25	yes	sr	unc			yes					
Towhee	sr	c				tv	fc	Mar. 29, Apr. 15	Apr. 23, May 3	Oct. 8			tv	unc	Mar. 20	Nov. 3		sr	c	Apr. 21, 30		yes
Cardinal					yes	tv, sr	fc, oc	Apr. 30	May 3				sr	fc	Apr. 20		yes					
														rare								

SPECIES RECORDED	CHENANGO							CLINTON			
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	B
Barred owl	sr	fc					yes	res	fc		
Great gray owl											
Richardson owl											
Saw-whet owl											
Screech owl	res	c					yes				
Great horned owl	res	c						res	fc		
Snowy owl								wv			
American hawk owl											
Burrowing owl											
Carolina paroquet											
Yellow-billed cuckoo	sr	c	May 18				yes				
Black-billed cuckoo	sr	fc	May 26				yes				
Belted kingfisher	sr	c	Apr. 13			Nov. 5	yes	sr	fc		
Hairy woodpecker	res	fc					yes	res	fc		
Downy woodpecker	res	c					yes	res	c		
Arctic three-toed woodpecker								res			
Am. three-toed woodpecker								res	unc		
Yellow-bellied sapsucker	tv	unc	Apr. 7					sr			
North. pileated woodpecker								res	unc		
Red-headed woodpecker	sr	c					yes	sr	unc	May 11	
Red-bellied woodpecker											
Northern flicker	sr	c	Apr. 20				yes	sr	c		
Whip-poor-will	sr	rare						sr	local		
Nighthawk	sr						yes	sr	unc		
Chimney swift	sr	ab				Oct. 10	yes	sr	c		
Ruby-throated hummingbird	sr	ab	May 15				yes	sr	fc		
Kingbird	sr	c	May 8				yes	sr	c	May 10	
Gray kingbird											
Arkansas kingbird											
Crested flycatcher	sr	fc					yes	sr	fc	May 10	
Phoebe	sr	c	Apr. 9				yes	sr	c		
Olive-sided flycatcher								sr			
Wood pewee	sr	c	May 20				yes	sr	fc		
Yellow-bellied flycatcher	tv		May 20					sr			
Green-crested flycatcher											
Alder flycatcher								sr			
Least flycatcher	sr	ab	May 2				yes	sr	c		
Skylark											
Horned lark											
Hoyt horned lark											
Prairie horned lark	sr	unc					yes	sr			yes
Blue jay	res	c					yes	res	c		
Canada jay								res	fc		
Northern raven											
American crow	res	c					yes	sr	c		yes
Fish crow											
Starling											
Bobolink	sr	c					yes	sr	c	May 10, 15	
Cowbird	sr	c					yes	sr	fc		
Yellow-headed blackbird											
Red-winged blackbird	sr	c	Mar.				yes	sr	ab		yes
Meadowlark	sr	c	Mar. 20				yes	sr	fc		
Orchard oriole	sr	c	May 13				yes				
Baltimore oriole	sr	c	May 5				yes	sr	fc		
Bullock oriole											
Rusty blackbird	tv	fc				Sept. 19, Oct.		tv			
Purple grackle											
Bronzed grackle	sr	c	Mar. 23				yes	sr	c		
Evening grosbeak											
Pine grosbeak											
House sparrow								res	c		
Chaffinch											
Greenfinch											
Purple finch	sr	c					yes	sr	fc		
American crossbill								res			
White-winged crossbill											
Hoary redpoll											
Redpoll	wv	oc	Apr. 15					tv			
Holboell redpoll											
Greater redpoll											
European linnet											
American goldfinch	sr	c	Mar. 1				yes	sr	c		
Pine siskin								res	irreg		
European goldfinch											
Snowflake	wv	oc						wv	fc		
Lapland longspur											
Chestnut-collared longspur											
Vesper sparrow	sr	c	Apr.				yes	sr	c		
Ipswich sparrow											
Savanna sparrow								sr	c		
Baird sparrow											
Grasshopper sparrow											
Henslow sparrow											
Leconte sparrow											
Sharp-tailed sparrow											
Nelson sparrow											
Acadian sharp-tailed sparrow											
Seaside sparrow											
Lark sparrow											
White-crowned sparrow	tv	rare	May 9					tv			
Gambel sparrow											
White-throated sparrow	tv	c	May 2			Oct. 12		sr	c		
Tree sparrow	wv	fc		Apr. 15				tv			
Chipping sparrow	sr	c	Apr. 15			Oct. 16	yes	sr	c		
Field sparrow	sr	c				Oct. 12	yes	sr	fc		
Slate-colored junco	tv, sr	c, rare		Apr. 29	Oct. 10		yes	sr	c		May
Carolina junco											
Song sparrow	sr	c	Feb. 24, Mar. 12			Nov. 5	yes	sr	c		
Lincoln sparrow		rare	May 8					sr	unc, 10 May '05		
Swamp sparrow	tv, sr	rare, fc					yes	sr	c		
Fox sparrow								tv			
Towhee	tv, sr	fc	May 13			Oct. 12	yes				
Cardinal											

COLUMBIA							CORTLAND			
ident or sient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north
							res	c		
							tv			
						yes	res	c		
							res	c		
							wv	oc		
	fc	May 14				yes	sr	c	May	
	fc	May 3				yes	sr	c	May 1	
						yes	sr	c	Mar. 25, Apr. 10	
						yes	res	fc		
						yes	res	c		
							tv, sr	fc, rare	Apr. 9, 15	June 9
							res	rare		
						yes	sr, res	local, oc		
							wv	oc		
	c	Mar. 27				yes	sr	ab	Apr. 14, 15	
		Apr. 26				yes	sr	rare		
						yes	sr		May	
	c	May 7				yes	sr	ab	Apr. 28, May 4	
	c	May 7, 10				yes	sr	c	May 12	
	c	Apr. 30, May 2				yes	sr	ab	Apr. 28, May 2	
						yes	sr	fc	May 2, 5	
	c	Mar. 26				yes	sr	ab	Mar. 26, Apr. 1	
						yes	sr	c	May 15	
		May 16					tv	rare		
							sr	fc, local		
	c	May 1, 6			Sept. 30	May 30	sr	c	May 1	
						Apr. 13	sr, tv	fc, ab		
	c					yes	res	c		
	ab					Apr. 15, May 1	res	ab		
	c	May 3, 5				yes	sr	c	May 10	
	ab	Mar. 15				yes	sr	ab	Mar. 15	
	ab	Mar. 9, 18				yes	sr, res	ab, rare	Mar. 15	
	ab, oc	Mar. 10, 15				yes	sr, res	ab, oc	Mar. 10, 16	
	c	May 15				yes	sr	rare		
	c	May 5, 7				yes	sr	ab	Apr. 24, May 3	
							tv	ab, fall		
	ab	Mar. 20				yes	sr	ab	Mar. 20, 24	
	oc			14 Jan. '96			wv	oc, 1884, 1895–96		
	ab					yes	res	ab		
	c	Mar. 15				yes	sr	c	Mar. 15	
	oc			Jan. 25			wv	oc, 1889–1900		
	rare						wv	rare		
	oc						wv	rare		24 Feb. '07
	c	May				yes	sr, res	ab, oc		
	oc						tv	fc	Mar. 31	Apr. 13
	irreg		Mar	Dec			wv	oc		Mar. 21
	ab	Apr. 7				2 broods	sr	ab	Mar. 29, Apr. 5	
	fc	Apr. 1				yes	sr	c	Apr. 12	
						yes	sr	unc		
	unc	May 15	May 17				tv	fc	May 6, 12	May 17
	c, unc	May 1				yes, local	tv	c	Apr. 20, 25	May 10
	c						wv	ab		Apr. 15, 26
	c	Apr. 12				yes	sr	ab	Apr. 15	
						yes	sr	c	Apr. 14, 18	
	c, local					yes	tv, sr	ab, fc	Mar. 5, 20	Apr. 30
	c	Mar. 18				yes	sr	ab	Mar. 5, 16	
						yes	sr	unc	Apr.	
	fc						tv	fc	Apr. 5	
	c					yes	sr	local	May 4	

SPECIES RECORDED	CHENANGO							CLINTON				COLUMBIA							CORTLAND			
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north
Barred owl	sr	fc					yes	res	fc										res	c		
Great gray owl																						
Richardson owl																						
Saw-whet owl																			tv			
Screech owl	res	c					yes					res						yes	res	c		
Great horned owl	res							res	fc										res	c		
Snowy owl								wv											wv	oc		
American hawk owl																						
Burrowing owl																						
Carolina parroquet																						
Yellow-bill l cuckoo	sr	c	May 18				yes					sr	fc	May 14				yes	sr	c	May	
Black billed cuckoo	sr	fc	May 20				yes					sr	fc	May 3				yes	sr	c	May 1	
Belted kingfisher	sr	c	Apr. 13			Nov. 5	yes	sr	fc			sr						yes	sr	c	Mar 25, Apr 10	
Hairy woodpecker	res	fc					yes	res	fc			res						yes	res	fc		
Downy woodpecker	res	c					yes	res	c			res						yes	res	c		
Arctic three-toe l woodpecker								res														
Am three-toed woodpecker								res	unc													
Yellow bellied sapsucker	tv	unc	Apr. 7					sr				tv							tv, sr	fc, rare	Apr 9, 15	June 9
North pileated woodpecker								res	unc										res	rare		
Red-headed woodpecker	sr	c					yes	sr	unc	May 11		sr						yes	sr, res	local, oc		
Red-bellied woodpecker																			wv	oc		
Northern flicker	sr	c	Apr. 20				yes	sr	c			sr	c	Mar. 27				yes	sr	ab	Apr 14, 15	
Whip-poor-will	sr	rare						sr	local			sr		Apr. 26				yes	sr	rare		
Nighthawk	sr						yes	sr	unc			sr						yes	sr		May	
Chimney swift	sr	ab				Oct 10	yes	sr	c			sr	c	May 7				yes	sr	ab	Apr 28, May 4	
Ruby-throated hummingbird	sr	ab	May 15				yes	sr	fc			sr	c	May 7, 10				yes	sr	c	May 12	
Kingbird	sr	c	May 8				yes	sr	c	May 10		sr	c	Apr. 30, May 2				yes	sr	ab	Apr. 28, May 2	
Gray kingbird																						
Arkansas kingbird																						
Crested flycatcher	sr	fc					yes	sr	fc	May 10		sr						yes	sr	fc	May 2, 5	
Phoebe	sr	c	Apr 9				yes	sr	c			sr	c	Mar 26				yes	sr	ab	Mar 20, Apr. 1	
Olive-sided flycatcher																						
Wood pewee	sr	c	May 20				yes	sr	fc			sr						yes	sr	c	May 15	
Yellow-bellied flycatcher	tv		May 20					sr											tv	rare		
Green-crested flycatcher																						
Alder flycatcher														May 16					sr	fc, local		
Least flycatcher	sr	ab	May 2					sr											sr	c	May 1	
Skylark							yes	sr	c			sr	c	May 1, 6			Sept. 30	May 30				
Horned lark																						
Hoyt horned lark																						
Prairie horned lark	sr	unc																Apr. 13	sr, tv	fc, ab		
Blue jay	res						yes	sr			yes	sr							res	c		
Canada jay							yes	res	c			res	c					yes				
Northern raven								res	fc													
American crow	res																					
Fish crow							yes	sr	c		yes	res	ab					Apr. 15, May 1	res	ab		
Starling																						
Bobolink	sr	c																			May 10	
Cowbird	sr	c					yes	sr	c	May 10, 15		sr	c	May 3, 5				yes	sr	c		
Yellow-headed blackbird							yes	sr	fc			sr	ab	Mar. 15				yes	sr	ab	Mar 15	
Red winged blackbird	sr	c	Mar.																			
Meadowlark	sr	c	Mar. 20				yes	sr	ab		yes	sr	ab	Mar. 9, 18				yes	sr, res	ab, rare	Mar. 15	
Orchard oriole	sr	c	May 13				yes	sr	fc			sr, res	ab, oc	Mar. 10, 15				yes	sr, res	ab, oc	Mar. 10, 16	
Baltimore oriole	sr	c	May 5				yes					sr	c	May 15				yes	sr	rare		
Bullock oriole							yes	sr	fc			sr	c	May 5, 7				yes	sr	ab	Apr 24, May 1	
Rusty blackbird	tv	fc										tv							tv	ab, fall		
Purple grackle						Sept 10, Oct		tv														
Bronzed grackle	sr	c	Mar. 23																			
Evening grosbeak							yes	sr	c			sr	ab	Mar. 20				yes	sr	ab	Mar 22, 24	
Pine grosbeak																						
House sparrow												wv	oc			14 Jan. '06			wv	oc, 1884, 1895–06		
Chaffinch								res	c			res	ab					yes	res	ab		
Greenfinch																						
Purple finch	sr	c																	sr	c	Mar 15	
American crossbill							yes	sr	fc			sr	c	Mar 15				yes	wv	oc, 1889–1900		
White-winged crossbill								res				wv	oc			Jan. 25			wv	rare		
Hoary redpoll												wv	rare									
Redpoll	wv	oc	Apr 15																wv	rare		24 Feb '07
Holboell redpoll								tv				wv	oc									
Greater redpoll																						
European linnet																						
American goldfinch	sr	c	Mar. 1																sr, res	ab, oc		
Pine siskin							yes	sr	c			sr	c	May				yes	tv	fc	Mar 31	Apr 13
European goldfin h								res	irreg			tv	oc									Mar 21
Snowflake	wv	oc																	wv	oc		
Lapland longspur								wv	fc			wv	irreg		Mar	Dec						
Chestnut-collared longspur																						
Vesper sparrow	sr	c	Apr															2 broods	sr	ab	Mar 29, Apr 5	
Ipswich sparrow							yes	sr	c			sr	ab	Apr 7								
Savanna sparrow																			sr	c	Apr 12	
Baird sparrow								sr	c			sr	fc	Apr. 1				yes				
Grasshopper sparrow																			sr	unc		
Henslow sparrow												sr						yes				
Leconte sparrow																						
Sharp tailed sparrow																						
Nelson sparrow																						
Acadian sharp tailed sparrow																						
Seaside sparrow																						
Lark sparrow																						
White-crowned sparrow	tv	rare	May 9																tv	fc	May 6, 12	May 17
Gambel sparrow												tv	unc	May 15	May 17							
White throated sparrow	tv	c	May 2					tv													Apr 20, 25	May 10
Tree sparrow	wv	fc				Oct 12						tv, sr	c, unc	May 1				yes, local	tv	c		Apr 15, 20
Chipping sparrow	sr	c	Apr 15	Apr 15				sr	c			wv	c						wv	ab	Apr 15	
Field sparrow	sr	c				Oct 16	yes	tv				sr	c	Apr. 12				yes	sr	ab,	Apr 14 18	
Slate-colored junco	tv, sr	c, rare				Oct 12	yes	sr	c			sr						yes	sr	ab, fc	Mar 5, 20	Apr 10
Carolina junco				Apr 20	Oct 10		yes	sr	fc			tv, sr	c, local					yes	tv, sr			
Song sparrow	sr	c	Feb 24 Mar 12				yes	sr	c		May 25									ab	Mar 5, 16	
Lincoln sparrow		rare	May 8			Nov 5												yes	sr			
Swamp sparrow	tv, sr	rare, fc					yes	sr	c			sr	c	Mar. 18					sr	unc	Apr	
Fox sparrow								sr	unc, 10 May '05									yes	tv	fc	Apr 5	
Towhee	tv, sr	fc	May 13				yes	sr	c			sr							tv	local	May 4	
Cardinal						Oct 12	yes	tv				tv	fc					yes	sr			
												sr	c									

SPECIES RECORDED	CORTLAND (*continued*)			DELAWARE					
	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Departs for south	Bre
Barred owl			yes	res	c				yes, Ju
Great gray owl									
Richardson owl									
Saw-whet owl	16 Nov. '93			tv	unc	21 Apr. '00			
Screech owl			Apr. 5	res	c				yes
Great horned owl			yes	res	unc				
Snowy owl	23 Feb. '91			wv	oc				
American hawk owl									
Burrowing owl									
Carolina paroquet									
Yellow-billed cuckoo			June 1, 9	sr	oc				yes
Black-billed cuckoo			May 27, June 6, Aug. 1	sr	c	May 10			yes
Belted kingfisher			May 20	sr	c	Apr. 2, 21			yes
Hairy woodpecker			yes	res	fc				
Downy woodpecker			May 10	res	c				
Arctic three-toed woodpecker				wv	oc				
Am. three-toed woodpecker									
Yellow-bellied sapsucker				tv, sr (?)	fc				
North. pileated woodpecker			25 May '05	res	rare				
Red-headed woodpecker			May 20	sr	fc				
Red-bellied woodpecker									
Northern flicker		Oct. 25	May 10, 25						
Whip-poor-will				sr	oc	May			
Nighthawk		Sept.	yes	tv, sr	ab, fall; fc				
Chimney swift		Sept.	yes	sr	c	May 8			yes
Ruby-throated hummingbird		Sept. 29	June	sr	c	May 18			yes
Kingbird		Sept. 25	May 25	sr	c	May 12			yes
Gray kingbird									
Arkansas kingbird									
Crested flycatcher			yes	sr	c	May 12, 25			
Phoebe		Oct. 1	May 5, 15	sr	c	Apr. 6			yes
Olive-sided flycatcher									
Wood pewee			yes	sr	c				yes
Yellow-bellied flycatcher	12 Sept. '93								
Green-crested flycatcher				sr	fc	May 25			
Alder flycatcher			June 21, 30, July 16						
Least flycatcher		Sept. 30	May 30	sr	c	May 8			
Skylark									
Horned lark									
Hoyt horned lark									
Prairie horned lark			Apr. 13	sr	fc				
Blue jay			yes	res	c				yes
Canada jay									
Northern raven									
American crow			Apr. 15, May 1	tr, res	ab, fc				yes
Fish crow									
Starling									
Bobolink		Aug.	yes	sr	ab	May 10			yes
Cowbird			yes	sr	fc	Apr. 22			yes
Yellow-headed blackbird									
Red-winged blackbird		Nov.	yes	sr	c	Apr. 21			yes
Meadowlark			yes	sr	fc	May 10			yes
Orchard oriole				sr	unc				yes
Baltimore oriole		Sept.	June 1	sr	ab	May 8			yes
Bullock oriole				tv	ab, fall				
Rusty blackbird									
Purple grackle									
Bronzed grackle			yes	sr	fc				yes
Evening grosbeak									
Pine grosbeak				wv	c, 1899, 1900		Mar. 20		
House sparrow			yes	res	ab				yes
Chaffinch									
Greenfinch									
Purple finch		Oct.	yes	sr	fc				May 20
American crossbill	25 Jan. '90								
White-winged crossbill				wv	rare, Dec. '99				
Hoary redpoll									
Redpoll									
Holboell redpoll									
Greater redpoll									
European linnet									
American goldfinch			July 15, Aug. 5	sr	fc				
Pine siskin	Oct. 29	Nov. 23		tv	oc				
European goldfinch									
Snowflake	Dec.			wv	ab, Feb. '00				
Lapland longspur									
Chestnut-collared longspur									
Vesper sparrow		Nov. 1	2 broods	sr	c	Apr. 22			yes
Ipswich sparrow									
Savanna sparrow		Oct.	May 9, 30	tv					
Baird sparrow									
Grasshopper sparrow				sr	unc			Oct.	
Henslow sparrow									
Leconte sparrow									
Sharp-tailed sparrow									
Nelson sparrow									
Acadian sharp-tailed sparrow									
Seaside sparrow									
Lark sparrow									
White-crowned sparrow	Oct. 15			tv		May 10		Oct.	
Gambel sparrow									
White-throated sparrow	Sept. 25	Oct. 20		tv, sr	fc, oc				yes, loc
Tree sparrow	Oct. 20			wv	c till Apr. 15		Apr. 15		
Chipping sparrow		Oct.	yes	sr	ab	Apr. 15			yes
Field sparrow		Oct.	yes	sr	c	Apr. 20			yes
Slate-colored junco	Oct.		June 12, July 18	tv, sr	c. unc				yes, Ma
Carolina junco									
Song sparrow		Nov. 5, 18	2 or 3 broods	sr	ab	Mar. 30			yes
Lincoln sparrow									
Swamp sparrow		Oct.	yes	sr	fc				
Fox sparrow				tv	unc				
Towhee			yes	sr	fc	May 25			yes
Cardinal									

DUTCHESS						ERIE				
esident or ansient	Common or rare	Arrives from south	Leaves for north	Returns from north	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north
	rare					res	unc			
						res, tv	rare, unc			Nov. 30
	c				yes	res	c			
	unc					res	fc			
						wv	oc		Mar.	Nov.
	c	May 10, 13			June 1, 15	sr	fc	May 10		
	c				May 27, June 10	sr	c	May 12		
	fc	Apr. 14			yes	sr, res	c, rare	Apr. 1, 8		
	fc				Apr. 25, May 15	res	fc			
	c				May 15, 25	res	c			
						wv	rare			26 Nov. '01
						tv, sr	c, rare	Apr. 5, 12		
						wv	rare			Oct. 4, Nov. 1, 9
	fc				May	sr, res	c, oc	May 10		
						tv, res	unc, rare			
	c	Mar. 30, Apr. 2			yes	sr, res	ab, rare	Apr. 12, 15		
	c, local	Apr. 29, 30			yes	sr	unc, local	May 1		
	fc	May 14			yes	tv, sr	c, fc			
	ab	Apr. 24, 27			yes	sr	ab	Apr. 24, May 1		
	c	May 8			May 21, July 4	sr	c	May 12		
	c	May 1, 4			June 1, 20	sr	c	May 1, 8		
	c	May 6			June 15	sr	c	May 1		
	ab	Mar. 23, Apr. 1			May 1, 25	sr	ab	Mar. 25, Apr. 5		
						tv, sr	rare, c	May 12		
	c	May 13			June 15, July 5	sr	c	May 10, 14		
						tv, sr	rare			
						sr	rare			
	fc				June 26	sr	unc	May 5		
	c	May 2, 4			May 29, June 10	sr	c	May 5, 10		
						wv	unc			
	unc				30 Apr. '00	tv, sr	ab, c	Feb. 12, 25		
	c				Apr. 4, June 12	res	fc	Apr. 15		
	c				yes	res, sr	fc, ab			
	c	Apr. 30, May 2			May 20, 30	sr	ab	May 1, 4		
	c	Mar. 30, Apr. 10			yes	sr	ab	Mar. 15, 25		
	ab	Mar. 8, 15			May 15, 30	sr	ab	Feb. 28, Mar. 12		
	c	Mar. 24, Apr. 6			May 20, 28	sr, res	ab, rare	Mar. 3, 15		
	fc	May 13, 15			yes	sr	rare	May 15		
	c	May 2, 4			May 25, June 5	sr	ab	May 1, 5		
	fc	Apr. 1				tv	c, fall	Mar. 25, Apr. 5	Apr. 5, May 10	Sept. 5, 15
	fc	Mar. 23			May 20					
						sr	ab	Mar. 3, 20		
						wv	rare		15 Apr. '87	10, 18 Jan. '90
	oc			Jan. '96		wv	oc			28 Dec. '82
	ab				yes	res	ab			
	fc				yes	sr	fc	Apr. 1, 6		
						wv	oc		29 June '88	Jan. '88
						wv	rare			28 Dec. '82
						wv	irreg		13 Apr. '81	28 Nov. '80
	ab				July 18	sr, res	ab, fc			
						wv	oc			
						wv	c		Mar. 10	Oct. 20, Nov. 10
						wv	rare			
	c	Apr. 1			May 16, June 10	sr	ab	Mar. 30, Apr. 7		
	fc					sr	c	Mar. 28, Apr. 6		
						sr	local	May 2		
						tv	rare			
						tv	c	May 5, 9	May 15, 18	Oct. 1
	c	Apr. 29				tv	c	Apr. 6, 24	May 15	Sept. 20
	c					wv	c		Apr. 20	Oct. 5
	ab	Apr. 7, 15			May 8, 30	sr	ab	Apr. 7, 16		
	c	Apr. 5, 17			May 20	sr	c	Apr. 8, 12		
	c, local	Mar. 1, 12	Apr. 20	Oct.		tv, res	c, unc			
	ab	Mar. 1, 10			2 broods	sr, res	ab, oc	Mar. 8, 12		
						tv	unc			Oct. 27
						sr	c	Apr. 16		
	fc	Apr. 1, 25				tv	fc	Apr. 10		Oct. 5
	c	Apr. 15, 20			yes	sr	fc	Apr. 20		
						av	twice			

SPECIES RECORDED	CORTLAND (continued)			DELAWARE						DUTCHESS						ERIE				
	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north
Barred owl			yes	res	c				yes, June 5	res	rare					res	unc			
Great gray owl																				
Richardson owl																				
Saw-whet owl	16 Nov. '93			tv	unc	21 Apr. '00										res, tv	rare, unc			Nov. 30
Screech owl			Apr. 5	res	c				yes	res	c				yes	res	c			
Great horned owl			yes	res	unc					res	unc					res	fc			
Snowy owl	23 Feb '91			wv	oc											wv	oc		Mar.	Nov.
American hawk owl																				
Burrowing owl																				
Carolina paroquet																				
Yellow-billed cuckoo			June 1, 9	sr	c				yes	sr	c	May 10, 13			June 1, 15	sr	fc	May 10		
Black-billed cuckoo			May 27, June 6, Aug 1	sr	c	May 10			yes	sr	c				May 27, June 10	sr	c	May 12		
Belted kingfisher			May 20	sr	c	Apr. 2, 21			yes	sr	fc	Apr. 14			yes	sr, res	c, rare	Apr. 1, 8		
Hairy woodpecker			yes	res	fc					res	fc				Apr. 25, May 15	res	fc			
Downy woodpecker			May 10	res	c					res	c				May 15, 25	res	c			
Arctic three-toed woodpecker				wv	oc											wv	rare			20 Nov. '01
Am three-toed woodpecker																				
Yellow-bellied sapsucker				tv, sr (?)	fc					tv						tv, sr	c, rare	Apr. 5, 12		
North. pileated woodpecker			25 May '05	res	rare											wv	rare			Oct. 4, Nov. 1, 9
Red-headed woodpecker			May 20	sr	fc					sr	fc				May	sr, res	c, oc	May 10		
Red-bellied woodpecker																tv, res	unc, rare			
Northern flicker		Oct 25	May 10, 25							sr	c	Mar. 30, Apr. 2			yes	sr, res	ab, rare	Apr. 12, 15		
Whip-poor-will				sr	oc	May				sr	c, local	Apr. 29, 30			yes	sr	unc, local	May 1		
Nighthawk		Sept.	yes	tv, sr	ab, fall; fc					sr	fc	May 14			yes	tv, sr	c, fc			
Chimney swift		Sept.	yes	sr	c	May 8			yes	sr	ab	Apr. 24, 27			yes	sr	ab	Apr. 24, May 1		
Ruby-throated hummingbird		Sept. 20	June	sr	c	May 18			yes	sr	c	May 8			May 21, July 4	sr	c	May 12		
Kingbird		Sept. 25	May 25	sr	c	May 12			yes	sr	c	May 1, 4			June 1, 20	sr	c	May 1, 8		
Gray kingbird																				
Arkansas kingbird																				
Crested flycatcher			yes	sr	c	May 12, 25				sr	c	May 6			June 15	sr	c	May 1		
Phœbe		Oct. 1	May 5, 15	sr	c	Apr. 6			yes	sr	ab	Mar. 23, Apr. 1			May 1, 25	sr	ab	Mar. 25, Apr. 5		
Olive-sided flycatcher																tv, sr	rare, c	May 12		
Wood pewee			yes	sr	c				yes	sr	c	May 13			June 15, July 5	sr	c	May 10, 14		
Yellow-bellied flycatcher	12 Sept. '93															tv, sr	rare			
Green-crested flycatcher				sr	fc	May 25										sr	rare			
Alder flycatcher			June 21, 30, July 16							sr	fc				June 26	sr	unc	May 5		
Least flycatcher		Sept. 30	May 30	sr	c	May 8				sr	c	May 2, 4			May 29, June 10	sr	c	May 5, 10		
Skylark																				
Horned lark																wv	unc			
Hoyt horned lark																				
Prairie horned lark			Apr. 13	sr	fc					sr	unc				30 Apr. '00	tv, sr	ab, c	Feb 12, 25		
Blue jay			yes	res	c				yes	res	c				Apr. 4, June 12	res	fc	Apr. 15		
Canada jay																				
Northern raven																				
American crow			Apr. 15, May 1	tr, res	ab, fc				yes	res	c				yes	res, sr	fc, ab			
Fish crow																				
Starling																				
Bobolink		Aug.	yes	sr	ab	May 10			yes	sr	c	Apr. 30, May 2			May 20, 30	sr	ab	May 1, 4		
Cowbird			yes	sr	fc	Apr. 22			yes	sr	c	Mar. 30, Apr. 10			yes	sr	ab	Mar. 15, 25		
Yellow-headed blackbird																				
Red-winged blackbird		Nov.	yes	sr	c	Apr. 21			yes	sr	ab	Mar. 8, 15			May 15, 30	sr	ab	Feb 28, Mar. 12		
Meadowlark			yes	sr	fc	May 10			yes	sr	c	Mar. 24, Apr. 6			May 20, 28	sr, res	ab, rare	Mar. 3, 15		
Orchard oriole				sr	unc				yes	sr	fc	May 13, 15			yes	sr	rare	May 15		
Baltimore oriole		Sept.	June 1	sr	ab	May 8			yes	sr	c	May 2, 4			May 25, June 5	sr	ab	May 1, 5		
Bullock oriole				tv	ab, fall															
Rusty blackbird										tv	fc	Apr. 1				tv	c, fall	Mar. 25, Apr 5	Apr. 5, May 10	Sept. 5, 15
Purple grackle										sr	fc	Mar. 23			May 20					
Bronzed grackle			yes	sr	fc				yes							sr	ab	Mar. 3, 20		
Evening grosbeak																wv	rare		15 Apr '87	10, 18 Jan. '90
Pine grosbeak				wv	c, 1899, 1900		Mar. 20			wv	oc			Jan '96		wv	fc			28 Dec. '82
House sparrow			yes	res	ab				yes	res	ab				yes	res	ab			
Chaffinch																				
Greenfinch																				
Purple finch		Oct.	yes	sr	fc				May 20	res	fc				yes	sr	fc	Apr 1, 6		
American crossbill	25 Jan. '90															wv	oc		20 June '88	Jan. '88
White-winged crossbill				wv	rare, Dec. '99											wv	rare			28 Dec. '82
Hoary redpoll																				
Redpoll																wv	irreg		13 Apr. '81	28 Nov. '80
Holboell redpoll																				
Greater redpoll																				
European linnet																				
American goldfinch			July 15, Aug. 5																	
Pine siskin	Oct 29	Nov. 23		sr	fc					res	ab				July 18	sr, res	ab, fc			
European goldfinch				tv	oc											wv	oc			
Snowflake	Dec																			
Lapland longspur				wv	ab, Feb. '00					wv						wv	c		Mar. 10	Oct. 20, Nov. 10
Chestnut-collared longspur																wv	rare			
Vesper sparrow		Nov. 1	2 broods																	
Ipswich sparrow				sr	c	Apr. 22			yes	sr	c	Apr. 1			May 10, June 10	sr	ab	Mar. 30, Apr. 7		
Savanna sparrow		Oct.	May 9, 30	tv													c	Mar. 28, Apr. 6		
Baird sparrow										sr	fc					sr				
Grasshopper sparrow																				
Henslow sparrow				sr	unc			Oct.								sr	local	May 2		
Leconte sparrow																				
Sharp-tailed sparrow																				
Nelson sparrow																				
Acadian sharp-tailed sparrow																tv	rare			
Seaside sparrow																				
Lark sparrow																				
White-crowned sparrow	Oct 15																			
Gambel sparrow				tv		May 10		Oct.								tv	c	May 5, 9	May 15, 18	Oct 1
White-throated sparrow	Sept 25	Oct 20																		
Tree sparrow	Oct 20			tv, sr	fc, oc				yes, local	tv	c	Apr. 29				tv	c	Apr. 6, 24	May 15	Sept 20
Chipping sparrow		Oct.	yes	wv	c till Apr. 15		Apr. 15			wv	c					wv	c		Apr. 20	Oct 5
Field sparrow		Oct.	yes	sr	ab	Apr. 15			yes	sr	ab	Apr. 7, 15			May 8, 30	sr	ab	Apr 7, 10		
Slate-colored junco	Oct.		June 12, July 18	sr	c	Apr 20			yes	sr	c	Apr. 5, 17			May 20	sr	c	Apr 8, 12		
Carolina junco				tv, sr	c, unc				yes, May 25	tv, sr	c, local	Mar. 1, 12	Apr. 20	Oct.		tv, res	c, unc			
Song sparrow		Nov 5, 18	2 or 3 broods	sr	ab	Mar 30			yes	sr	ab	Mar. 1, 10			2 broods	sr, res	ab, oc	Mar 8, 12		Oct 27
Lincoln sparrow																tv	unc			
Swamp sparrow		Oct.	yes	sr	fc					sr						sr	c	Apr. 16		
Fox sparrow				tv	unc					tv	fc	Apr. 1, 25				tv	fc	Apr 13		Oct 5
Towhee			yes	sr	fc	May 25			yes	sr	c	Apr. 15, 20			yes	sr	fc	Apr. 20		
Cardinal																av.	twice			

SPECIES RECORDED	ERIE (*continued*)		ESSEX						
	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breed
Barred owl		Apr. 15	res	c					yes
Great gray owl									
Richardson owl			av				Dec. '96		
Saw-whet owl		yes	res						
Screech owl		Apr. 1	res	unc					yes
Great horned owl		Mar. 8	res	unc					yes
Snowy owl			wv	rare					
American hawk owl									
Burrowing owl									
Carolina paroquet									
Yellow-billed cuckoo		May 30, July 15							
Black-billed cuckoo		May 30, July 1	sr	rare	May			Oct. 4	yes
Belted kingfisher		yes	sr	c	Apr. 19, 26			Oct. 4	yes
Hairy woodpecker		Apr. 25	res	c					yes
Downy woodpecker		May 1, 15	res	c					yes
Arctic three-toed woodpecker			res	fc					May
Am. three-toed woodpecker			res	fc					May 25, Ju
Yellow-bellied sapsucker		yes	sr	c	Apr. 14, 20			Oct. 5	June 1, 15
North. pileated woodpecker		formerly	res	unc					yes
Red-headed woodpecker		May 20	sr	rare					yes
Red-bellied woodpecker		1 June '95							
Northern flicker	Nov. 1	May 5, 25	sr	c	Apr. 20, 24			Oct 20	yes
Whip-poor-will		yes	sr	local	May 8				yes
Nighthawk		yes	sr, tv	unc, c	May 7, 18			Sept. 10, 20	yes
Chimney swift	Oct.	May 20, June 15	sr	c	May 1, 9			Sept. 18	yes
Ruby-throated hummingbird		June 1	sr	c	May 14			Sept.	yes
Kingbird		May 20, June 10	sr	c	May 6, 12			Sept. 18	yes
Gray kingbird									
Arkansas kingbird									
Crested flycatcher		May 25, June 15	sr	unc	May 13				yes
Phoebe	Oct. 15	2 broods	sr	fc	Mar. 30, Apr. 3			Oct. 2, 13	yes
Olive-sided flycatcher		yes	sr	fc					yes
Wood pewee	Sept. 1	May 30, June 20	sr	c	May 11, 14			Sept	yes
Yellow-bellied flycatcher		yes	sr	fc					yes
Green-crested flycatcher		yes							
Alder flycatcher		June 10, 22	sr	fc					yes
Least flycatcher		May 20, June 15	sr	c	May 3				yes
Skylark									
Horned lark			tv	oc			Oct. 13		
Hoyt horned lark									
Prairie horned lark		Mar. 10, Apr. 15	sr	unc				Oct. 5	yes, 1905
Blue jay		Apr. 15	res	c					yes
Canada jay			res	fc					yes
Northern raven			wv	rare			Oct. 23		
American crow		Apr. 15, May 10	sr	c	Feb. 20, Mar. 15				yes
Fish crow									
Starling									
Bobolink	Sept. 1, 10	May 20, June 5	sr	c	May 13				yes
Cowbird	Oct.	May 5, June 30	sr	fc	Apr. 13			Oct. 10	yes
Yellow-headed blackbird									
Red-winged blackbird	Oct. 20, Nov. 10	Apr. 30, May 20	sr	c	Mar. 30, Apr. 2			Sept. 18	yes
Meadowlark	Oct. 25, Nov. 15	May 25, June 10	sr	rare	May 1			Oct. 20	
Orchard oriole	Aug.	June 5	sr	rare, 1905					
Baltimore oriole	Sept.	May 15, June 10	sr	rare	May 6				yes
Bullock oriole									
Rusty blackbird	Nov. 10		tv	c			Sept. 24	Oct. 22	
Purple grackle									
Bronzed grackle	Oct.	Apr. 20, May 15	sr	fc	Mar. 18			Oct. 17	yes
Evening grosbeak			wv	rare	20 Apr. '90				
Pine grosbeak									
House sparrow		yes	res	c					yes
Chaffinch									
Greenfinch									
Purple finch	Oct.	May 20, June 15	sr	c	Apr. 1				yes
American crossbill			res	unc					
White-winged crossbill									
Hoary redpoll									
Redpoll			tv		Apr. 3	Apr. 14			
Holboell redpoll									
Greater redpoll									
European linnet									
American goldfinch		June 25, Aug. 10	sr, res	c, unc					yes
Pine siskin			res	irreg					c, 1905
European goldfinch									
Snowflake			wv	c, irreg					
Lapland longspur			wv	rare					
Chestnut-collared longspur									
Vesper sparrow	Oct.	May 10, 30	sr	fc	Apr. 6			Oct. 26	yes
Ipswich sparrow									
Savanna sparrow	Oct. 20	May 20, 30	sr	fc	Apr. 10, 14, 29			Oct. 26	yes
Baird sparrow									
Grasshopper sparrow		June	sr	rare, 1905					
Henslow sparrow									
Leconte sparrow									
Sharp-tailed sparrow									
Nelson sparrow			tv	?					
Acadian sharp-tailed sparrow									
Seaside sparrow									
Lark sparrow									
White-crowned sparrow	Oct. 20		tv	c	May 4, 10		Sept. 20, 26	Oct. 25	
Gambel sparrow									
White-throated sparrow	Oct. 20		sr	c	Apr. 27			Oct. 24	yes
Tree sparrow			wv			May 3	Oct. 19		
Chipping sparrow	Oct. 15	2 broods	sr	c	Apr. 15, 20			Oct. 26	yes
Field sparrow		2 broods	sr	fc	Mar. 29, Apr. 10				yes
Slate-colored junco		May 10, 22, June 3	sr	ab	Mar. 30, Apr. 5			Oct. 26	May 2, 25
Carolina junco									
Song sparrow		2 or 3 broods	sr	c	Mar. 20, 24				yes
Lincoln sparrow			sr	c					yes
Swamp sparrow		yes	sr	fc	Apr. 29				yes
Fox sparrow	Nov. 1		tv	fc	Apr. 30		Sept. 10, Oct.	Oct. 26	
Towhee	Sept. 25	May 15, 30	sr	unc	Apr. 27				yes
Cardinal									

	FRANKLIN					FULTON					GENESEE	
dent r sient	Common or rare	Arrives from south	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Breeds	Resident or transient	Common or rare
	c					res	fc			yes	res	rare
	once, 1870											
	unc					res	unc			yes		
	fc					res	c			yes	res	c
	unc				yes	res	c			yes	res	rare
						wv	rare	Feb. 27			wv	rare
						wv	rare					
											sr	c
	unc			Sept. 5	yes	sr	c			yes	sr	c
	fc	Apr. 17			yes	sr	c	Apr. 8		yes	sr	c
					yes	res	c			yes	res	c
	c				yes	res	c			yes	res	c
	fc				yes							
	fc				yes							
	c	Apr. 17		Sept. 20	yes	sr	unc	Apr. 8		yes	tv	unc
	unc; c, fall				yes	res	unc					
						sr	rare	May 11, 16		yes	sr	c
	fc, ab	Apr. 14			yes	sr	c	Apr. 4		yes	sr	c
	local	Apr. 26			yes	sr	c	May 3		yes	sr	unc
	oc, ab	May 20		Sept. 8	yes	sr	c	May 6		yes	sr	c
	c	May 17		Sept. 5	yes	sr	c	Apr. 23		yes	sr	c
	c	May 20		Sept. 11	yes	sr	c	May 12		yes	sr	c
	c	May 21			yes	sr	c	May 5		yes	sr	c
	fc			Sept. 13		sr	unc	Apr. 29		yes	sr	unc
	c	May 3			yes	sr	c	Mar. 26		yes	sr	c
	unc	May 19			yes							
	c	May 21			yes	sr	c	May 8		yes	sr	c
	c	May 24	Aug. 18	Sept. 8	yes							
	fc	May 23			yes	sr	fc	May 2		yes		
	fc	May 17		Sept. 2	yes	sr	c	May 1, 6		yes	sr	c
						wv	rare					
	local	Apr. 13			yes	sr	c			yes	sr	c
	c				yes	res	c			yes	res	unc
	fc				yes							
	unc											
	fc, ab				yes	res, sr	fc, ab			yes	res	ab
	fc	May 15			yes	sr	c	May 5		yes	sr	c
						sr	c			yes	sr	c
	fc, c	May 5			yes	sr	c	Mar. 8, 28		yes	sr	c
	unc	Apr. 18			yes	sr	c	Mar. 28		yes	sr	c
	fc	May 13			yes	sr	c	May 6, 8		yes	sr	c
	c, unc	Apr. 27			yes							
	fc	Apr. 18			yes	sr	c			yes	sr	c
	oc					wv	oc					
	c				yes	res	ab			yes	res	ab
	c	Apr. 23		Sept. 15	yes	tv	c	Mar. 31			sr	c
	c, Sept	Apr. 14			yes							
	1877											
	c, oc				yes	sr, res	c, oc			yes	sr	c
	c				yes							
						wv	c	Jan. 27	Mar. 31		wv	c, irreg
						wv	oc					
	fc	Apr. 13		Sept	yes	sr	c	Mar. 29			sr	c
	c	Apr. 27			yes	sr	c	Apr. 16		yes		
	c	May 12	Sept. 9			tv	c	May 5			tv	unc
	c	Apr. 27		Sept	yes	tv, sr	c, c local	Apr. 13	May 27	yes	tv	c
						wv	c		Apr. 4		wv	
	c	Apr. 8, 15		Sept. 9	yes	sr	c	Mar. 31, Apr. 10		yes	sr	c
	local	Apr. 27			yes	sr	c	Mar. 31, Apr. 10		yes	sr	
	ab, c				yes	wv, sr	c, local			yes	tv	c
	c				yes	sr	ab	Mar. 21		yes	sr	c
	fc	May 17			yes							
	c	Apr. 27			yes	sr	c	Apr. 29		yes	sr	fc
						tv	unc	Apr. 25				
						sr	c	Apr. 26, 30		yes	sr	c

SPECIES RECORDED	ERIE (*continued*)		ESSEX							FRANKLIN						FULTON					GENESEE	
	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Breeds	Resident or transient	Common or rare
Barred owl		Apr. 15	res	c					yes	res	c					res	fc			yes	res	rare
Great gray owl							Dec. '96			wv	once, 1870											
Richardson owl			av								unc					res	unc			yes		
Saw-whet owl			res													res	c			yes	res	c
Screech owl		Apr. 1	res	unc					yes	res	fc					res	c			yes	res	rare
Great horned owl		Mar. 8	res	unc					yes	rcs	unc				yes	wv	rare	Feb. 27			wv	rare
Snowy owl			wv	rare												wv	rare					
American hawk owl																						
Burrowing owl																						
Carolina paroquet																					sr	c
Yellow-billed cuckoo		May 30, July 15									unc			Sept. 5	yes	sr	c			yes	sr	c
Black-billed cuckoo		May 30, July 1	sr	rare	May			Oct. 4	yes	sr	fc	Apr. 17			yes	sr	c	Apr. 8		yes	sr	c
Belted kingfisher		yes	sr	c	Apr. 19, 26			Oct. 4	yes	res					yes	res	c			yes	res	c
Hairy woodpecker		Apr. 25	res	c					yes	res	c				yes	res	c			yes	res	c
Downy woodpecker		May 1, 15	res	c					May	res	fc				yes							
Arctic three-toed woodpecker			res	fc					May 25, June 10	res	fc				yes							
Am. three-toed woodpecker			res	fc					June 1, 15	sr	c	Apr. 17		Sept. 20	yes	sr	unc	Apr. 8		yes	tv	unc
Yellow-bellied sapsucker		yes	sr	c	Apr. 14, 20			Oct. 5	yes	res, tv	unc, c, fall				yes	res	unc					
North. pileated woodpecker		formerly	res	unc					yes							sr	rare	May 11, 16		yes	sr	c
Red-headed woodpecker		May 20	sr	rare																		
Red-bellied woodpecker		1 June '95								sr, tv	fc, ab	Apr. 14			yes	sr	c	Apr. 4		yes	sr	c
Northern flicker	Nov. 1	May 5, 25	sr	c	Apr. 20, 24			Oct 20	yes	sr	local	Apr. 26			yes	sr	c	May 3		yes	sr	unc
Whip-poor-will		y.s.	sr	local	May 8				yes	sr, tv	oc, ab	May 20		Sept. 8	yes	sr	c	May 6		yes	sr	c
Nighthawk		yes	sr, tv	unc, c	May 7, 18			Sept. 10, 20	yes	sr	c	May 17		Sept. 5	yes	sr	c	Apr 23		yes	sr	c
Chimney swift	Oct.	May 20, June 15	sr	c	May 1, 9			Sept. 18	yes	sr	c	May 20		Sept. 11	yes	sr	c	May 12		yes	sr	c
Ruby-throated hummingbird		June 1	sr	c	May 14			Sept.	yes	sr	c	May 21			yes	sr	c	May 5		yes	sr	c
Kingbird		May 20, June 10	sr	c	May 6, 12			Sept. 18	yes	sr												
Gray kingbird																						
Arkansas kingbird																sr	unc	Apr. 20		yes	sr	unc
Crested flycatcher		May 25, June 15	sr	unc	May 13				yes	sr	fc			Sept. 13		sr	c	Mar. 26		yes	sr	c
Phoebe	Oct. 15	2 broods	sr	fc	Mar. 30, Apr. 3			Oct. 2, 13	yes	sr	c	May 3			yes							
Olive-sided flycatcher		yes	sr	fc					yes	sr	unc	May 19			yes	sr	c	May 8		yes	sr	c
Wood pewee	Sept. 1	May 30, June 20	sr	c	May 11, 14			Sept	yes	sr	c	May 21			yes							
Yellow-bellied flycatcher		yes	sr	fc					yes	sr, tv	c	May 24	Aug. 18	Sept. 8	yes							
Green-crested flycatcher		yes														sr	fc	May 2		yes		
Alder flycatcher		June 10, 22	sr	fc					yes	sr	fc	May 23			yes	sr	c	May 1, 6		yes	sr	c
Least flycatcher		May 20, June 15	sr	c	May 3				yes	sr	fc	May 17		Sept. 2	yes							
Skylark																wv	rare					
Horned lark			tv	oc			Oct. 13															
Hoyt horned lark																sr	c			yes	sr	c
Prairie horned lark		Mar. 10, Apr. 15	sr	unc				Oct. 5	yes, 1905	sr	local	Apr. 13			yes	res	c			yes	res	unc
Blue jay		Apr. 15	res	c					yes	res	c				yes							
Canada jay			res	fc					yes	res	fc				yes							
Northern raven			wv	rare			Oct. 23			res	unc				yes	res, sr	fc, ab			yes	res	ab
American crow		Apr. 15, May 10	sr	c	Feb. 20, Mar. 15				yes	sr, tv	fc, ab											
Fish crow																						
Starling																sr	c	May 5		yes	sr	c
Bobolink	Sept. 1, 10	May 20, June 5	sr	c	May 13				yes	sr	fc	May 15			yes	sr	c			yes	sr	c
Cowbird	Oct.	May 5, June 30	sr	fc	Apr. 13			Oct. 10	yes	sr												
Yellow-headed blackbird																sr	c	Mar. 8, 28		yes	sr	c
Red-winged blackbird	Oct. 20, Nov. 10	Apr. 30, May 20	sr	c	Mar. 30, Apr. 2			Sept. 18	yes	sr, tv	fc, c	May 5			yes	sr	c	Mar. 28		yes	sr	c
Meadowlark	Oct. 25, Nov. 15	May 25, June 10	sr	rare	May 1			Oct. 20		sr	unc	Apr. 18			yes							
Orchard oriole	Aug.	June 5	sr	rare, 1905												sr	c	May 6, 8		yes	sr	c
Baltimore oriole	Sept.	May 15, June 10	sr	rare	May 6				yes	sr	fc	May 13			yes							
Bullock oriole																						
Rusty blackbird	Nov. 10		tv	c			Sept. 24	Oct. 22		tv, sr	c, unc	Apr. 27			yes							
Purple grackle																sr	c			yes	sr	c
Bronzed grackle	Oct.	Apr. 20, May 15	sr	fc	Mar. 18			Oct. 17	yes	sr	fc	Apr. 18			yes							
Evening grosbeak			wv	rare	20 Apr. '90											wv	oc			yes	res	ab
Pine grosbeak										wv	oc				yes	res	ab					
House sparrow		yes	res	c					yes	res	c											
Chaffinch																					sr	c
Greenfinch																						
Purple finch	Oct.	May 20, June 15	sr	c	Apr. 1				yes	sr	c	Apr. 23		Sept. 15	yes	tv	c	Mar. 31				
American crossbill			res	unc						sr	c, Sept	Apr. 14			yes							
White-winged crossbill																						
Hoary redpoll																						
Redpoll			tv		Apr. 3	Apr. 14				wv	1877											
Holboell redpoll																						
Greater redpoll																				yes	sr	c
European linnet																						
American goldfinch		June 25, Aug. 10	sr, res	c, unc					yes	sr, res	c, oc				yes	sr, res	c, oc					
Pine siskin			res	irreg					c, 1905	res	c				yes							
European goldfinch																wv	c	Jan. 27	Mar. 31		wv	c, irreg
Snowflake			wv	c, irreg												wv	oc					
Lapland longspur			wv	rare																		
Chestnut-collared longspur																sr	c	Mar. 29			sr	c
Vesper sparrow	Oct.	May 10, 30	sr	fc	Apr. 6			Oct. 26	yes	sr	fc	Apr. 13		Sept	yes	sr	c	Apr. 16		yes		
Ipswich sparrow															yes	sr	c					
Savanna sparrow	Oct. 20	May 20, 30	sr	fc	Apr. 10, 14, 29			Oct. 26	yes	sr	c	Apr. 27										
Baird sparrow																						
Grasshopper sparrow		June	sr	rare, 1905																		
Henslow sparrow																						
Leconte sparrow																						
Sharp-tailed sparrow																						
Nelson sparrow			tv	?																		
Acadian sharp-tailed sparrow																						
Seaside sparrow																						
Lark sparrow																tv	c	May 5			tv	unc
White-crowned sparrow	Oct. 20		tv	c	May 4, 10		Sept. 20, 26	Oct. 25		tv	c	May 12	Sept. 9									
Gambel sparrow																tv, sr	c, c local	Apr. 13	May 27	yes	tv	c
White-throated sparrow	Oct. 20		sr	c	Apr. 27					sr	c	Apr. 27		Sept	yes	wv	c		Apr. 4		wv	
Tree sparrow			wv					Oct. 24	yes	tv						sr	c	Mar. 31, Apr. 10		yes	sr	c
Chipping sparrow	Oct. 15	2 broods	sr	c	Apr. 15, 20	May 3	Oct. 19			sr	c	Apr. 8, 15		Sept. 9	yes	sr	c	Mar. 31, Apr. 10		yes	tv	c
Field sparrow		2 broods	sr	fc	Mar. 20, Apr. 10			Oct. 20	yes	sr	local	Apr. 27			yes	wv, sr	c, local					
Slate-colored junco		May 10, 22, June 3	sr	ab	Mar. 30, Apr. 5			Oct. 20	yes	tv, sr	ab, c				yes					yes	sr	c
Carolina junco									May 2, 25							sr	ab	Mar. 21				
Song sparrow		2 or 3 broods	sr	c	Mar. 20, 24				yes	sr	c				yes					yes	sr	fc
Lincoln sparrow			sr	c					yes		fc	May 17			yes	sr	c	Apr. 20				
Swamp sparrow		yes	sr	fc	Apr. 29				yes	sr	c	Apr. 27				tv	unc	Apr. 25		yes	sr	c
Fox sparrow	Nov. 1		tv	fc	Apr. 30		Sept. 10, Oct.	Oct. 20	yes							sr	c	Apr. 26, 30				
Towhee	Sept. 25	May 15, 30	sr	unc	Apr. 27				yes													
Cardinal																						

SPECIES RECORDED	GENESEE (*continued*)		GREENE			HAMILTON			
	Arrives from south	Breeds	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Departs for south	Breeds
Barred owl		yes				res	c		yes
Great gray owl						wv	rare, 1870		
Richardson owl									
Saw-whet owl						res	unc		May 1
Screech owl		yes	res		yes	sr			yes
Great horned owl		yes	res			res	fc		yes
Snowy owl			wv	oc		wv	unc		
American hawk owl						wv	rare		
Burrowing owl									
Carolina paroquet									
Yellow-billed cuckoo		yes	sr		yes				
Black-billed cuckoo		yes	sr		yes	sr			
Belted kingfisher	Mar. 25, Apr. 10	yes	sr	c	yes	sr	c		yes
Hairy woodpecker		yes	res	c	yes	res	c		yes
Downy woodpecker		yes	res	c	yes	res	fc		yes
Arctic three-toed woodpecker			res (?)	rare		res	fc		May 27, June 2, 8
Am. three-toed woodpecker						res	unc		June 8
Yellow-bellied sapsucker			tv	fc		sr	c		yes
North. pileated woodpecker						res	unc		yes
Red-headed woodpecker		yes	sr		yes	sr	unc		
Red-bellied woodpecker									
Northern flicker	Mar. 19, 27	yes	sr	c	yes	sr	fc		yes
Whip-poor-will	May 7	yes	sr		yes	sr	local		yes
Nighthawk	May 23	yes	sr		yes	sr	unc		yes
Chimney swift	May 3	yes	sr	c	yes	sr	c		yes
Ruby-throated hummingbird	May 9	yes	sr		yes	sr	c		yes
Kingbird	Apr. 30, May 5	yes	sr		yes	sr	fc		yes
Gray kingbird									
Arkansas kingbird									
Crested flycatcher		yes	sr		yes	sr	unc		yes
Phoebe	Mar. 30, Apr. 5	yes	sr	c	yes	sr	rare		yes
Olive-sided flycatcher						sr	fc		June 20, 24, 28
Wood pewee		yes	sr	c	yes	sr	c		yes
Yellow-bellied flycatcher			sr		local	sr	unc		June 18, 23, July 1
Green-crested flycatcher									
Alder flycatcher						sr	unc		June 23, 28, July 1
Least flycatcher			sr	c		sr	fc		June 5
Skylark									
Horned lark									
Hoyt horned lark									
Prairie horned lark		yes				sr	local		
Blue jay		yes	res	c	yes	res	c		yes
Canada jay						res	fc		yes
Northern raven						res	rare		
American crow		yes	res		yes	sr	c		yes
Fish crow									
Starling									
Bobolink	May 3, 6	yes	sr	c	yes	sr	unc		yes
Cowbird	Mar. 29	yes	sr	c	yes	sr	unc		yes
Yellow-headed blackbird									
Red-winged blackbird	Feb. 28, Mar. 8	yes	sr	c	yes	sr	unc		yes
Meadowlark	Mar. 29, Apr. 8	yes	sr	c	yes	sr	local		
Orchard oriole			sr		yes				
Baltimore oriole	May 2, 4	yes	sr	c	yes				
Bullock oriole									
Rusty blackbird			tv			sr	unc	Oct. 31	May 10, June 10
Purple grackle									
Bronzed grackle	Mar. 12, 15	yes	sr	c	yes	sr	unc		yes
Evening grosbeak									
Pine grosbeak			wv	oc		wv	oc		
House sparrow		yes	res	ab	yes	res	fc		yes
Chaffinch									
Greenfinch									
Purple finch	Apr. 2, 6	yes	tv			sr	c	Oct. 24, 27	
American crossbill			wv	oc		res	c		yes
White-winged crossbill						wv, res	fc, rare		yes
Hoary redpoll									
Redpoll			wv	oc		wv	oc		
Holboell redpoll									
Greater redpoll									
European linnet									
American goldfinch		yes	sr	c	yes	sr	c		yes
Pine siskin			wv	oc		sr	c, irreg		yes
European goldfinch									
Snowflake			wv	oc		wv	fc		
Lapland longspur									
Chestnut-collared longspur									
Vesper sparrow		yes	sr	c	yes	sr	fc		yes
Ipswich sparrow									
Savanna sparrow						sr	fc		yes
Baird sparrow									
Grasshopper sparrow			sr		yes				
Henslow sparrow									
Leconte sparrow									
Sharp-tailed sparrow									
Nelson sparrow									
Acadian sharp-tailed sparrow									
Seaside sparrow									
Larl sparrow									
White-crowned sparrow	May 9		tv			tv			
Gambel sparrow									
White-throated sparrow	Apr. 20, 30		tv	c		sr	c		yes
Tree sparrow			wv			tv	c		
Chipping sparrow	Apr. 8, 10	yes	sr	c	yes	sr	fc		yes
Field sparrow		yes	sr		yes	sr	unc		yes
Slate-colored junco			wv	c		sr	c		yes
Carolina junco									
Song sparrow	Mar. 3, 10	yes	sr	c	yes	sr	fc		yes
Lincoln sparrow						sr	unc		June 13, 16
Swamp sparrow		yes				sr	fc		yes
Fox sparrow			tv			tv, Oct.			
Towhee		yes	sr	c	yes	sr	unc, local		
Cardinal									

	HERKIMER				JEFFERSON					KINGS—QUEENS—NASSAU	
t	Common or rare	Arrives from south	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Departs for south	Breeds	Resident or transient	Common or rare
				es	res				yes	res	unc
			17 Dec. '89								
	unc			yes						wv	fc
				yes	res				yes	res	fc
				yes	res				Apr	wv	unc
	oc				wv	oc				wv	oc
	oc									av	once
	c	May 27	Sept. 1	yes	sr	c			yes	sr	c
	c	May 20	Sept. 1	yes	sr	unc			yes	sr	c
	c	Apr. 4	Oct. 31	yes	sr	c			yes	sr	c
	c			yes	res	unc			yes	res	fc
	c			yes	res	fc			yes	res	c
	unc			May 28, June 3, 8							
	unc			4 June '78							
	c			May 20, June 10	tv, sr	c, fc			yes	tv	fc
	rare			yes						1878 (last)	
	c, oc			yes	sr	fc			yes	sr, tv	rare, oc
	rare										rare
	c	Apr. 9, 11	Oct. 15	yes	sr	c	Apr. 20		yes	sr, res	ab, rare
	local			yes	sr	local			yes	sr	fc
	c	May 20	Sept. 20	yes	sr	c	May 20		yes	sr	c
	c	Apr. 25, 26	Sept. 19	yes	sr	c			yes	sr	ab
	c	May 21	Sept. 16	yes	sr	fc	May 20		yes	sr	c
	c	May 20	Aug. 29	yes	sr	c			yes	sr	c
	c	May 4	Aug. 17	yes	sr	fc	May 12		yes	sr	c
	c	Apr. 12	Sept. 16	yes	sr		Apr		yes	sr	c
				June 18, 23, July 16						tv	rare
	c	May 13, 21		June 18	sr	c	May 20		yes	sr	c
	unc	May 16, 20		June 8, 17, 25						tv	rare
	local									sr	fc
	fc			June 21, 25, July 21						sr	rare
	c	May 3, 6		yes	sr					sr	c
										res	local, 1887–98
		14 Mar. '84								wv	ab
										tv	rare
										tv, sr	oc, rare
	c			yes	res	c			May 12	res	c
	c			yes							
	unc			yes						av	
	c			yes	sr	ab			yes	res	ab
										sr, res	unc, rare
										res	fc, local
	c	May 3, 10		yes	sr	fc	May 12		yes	sr	fc, local
	c	Mar. 31, Apr. 2	Sept. 30, Oct. 21	yes	sr	fc			yes	sr, res	c, oc
	c	Apr. 2	Oct.	yes	sr	ab		Oct. 20	yes	sr	ab
	c	Mar. 28, Apr. 10		yes	sr	c	Apr. 8	Oct.	yes	sr, res	c
	rare	May 15								sr	fc
	c	May 2, 5		yes	sr	fc	May 4		yes	sr	c
	local, c	Mar. 28		May 7, 27, June 15	tv	c				tv	c
										sr	c
	c	Apr. 1		yes	sr				yes	tv	oc
		Feb. 20									
	rare									wv	
	ab			yes	res	ab			yes	res	ab
	c	Apr. 10	Sept. 16	yes	sr	ab			yes	wv, tv, sr	rare, fc, oc
	local, irreg			yes						wv	oc
	unc			yes						wv	1848–49, 1864
	unc									wv	oc
	c, oc	Apr. 16, May 4		yes	sr				yes	sr, res	ab, oc
	irreg			yes						wv	fc
	c				wv	c				wv	c
	rare									wv	oc
										av	16 Feb. '89
	c	Apr. 11	Oct. 26	yes	sr	c	Apr		yes	sr, res	c, oc
										wr	fc, local
		Apr		yes	sr		Apr		yes	sr, res	c, fc
										sr	fc
										sr, res	c, rare
										tv	rare
										sr	c
	unc	Apr. 29, May 13			tv	oc	May 21			tv	unc
	c	May 4		yes	tv	c				tv, wr	ab, rare
	c	May 4			wv					wv	ab
	c	Apr. 12, 17, May 4	Oct. 1	yes	sr	c	Apr. 21		yes	sr	ab
	c	Apr. 12		yes	sr					sr	c
	ab	Mar. 26, May 4	Sept. 30, Oct. 30	May 1, 16, June 1	res, tv	ab				wv, tv	c, ab
	c	Mar. 17, 23, May 4	Oct. 28	yes	sr	c	Mar		yes	sr, res	c, oc
				yes						tv	rare
		Apr. 15		yes	sr	fc			yes	sr, res	fc, oc
	c	Apr. 9	Aug. 31							tv, wv	fc, rare
	rare									sr, res	c, oc
										res	rare

SPECIES RECORDED	GENESEE (*continued*)		GREENE			HAMILTON				HERKIMER					JEFFERSON					KINGS—QUEENS—NASSAU	
	Arrives from south	Breeds	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Departs for south	Breeds	Resident or transient	Common or rare
Barred owl		yes				res	c		yes	res			17 Dec. '89	yes	res				yes	res	unc
Great gray owl						wv	rare, 1870			wv											
Richardson owl						res	unc		May 1		unc			yes						wv	fc
Saw-whet owl						sr			yes	res				yes	res				yes	res	fc
Screech owl		yes	res		yes	res	fc		yes	res				yes	res				Apr	wv	unc
Great horned owl		yes	res			wv	unc			wv	oc				wv	oc				wv	oc
Snowy owl			wv	oc		wv	rare			wv	oc									av	once
American hawk owl																					
Burrowing owl																					
Carolina parquet					yes					sr	c	May 27	Sept. 1	yes	sr	c			yes	sr	c
Yellow-billed cuckoo		yes	sr			sr				sr	c	May 20	Sept. 1	yes	sr	unc			yes	sr	c
Black-billed cuckoo		yes	sr		yes	sr	c		yes	sr	c	Apr. 4	Oct. 31	yes	sr	c			yes	sr	c
Belted kingfisher	Mar. 25, Apr. 10	yes	res		yes	res	c		yes	res	c			yes	res	unc			yes	res	fc
Hairy woodpecker		yes	res		yes	res	fc		yes	res	c			yes	res	fc			yes	res	fc
Downy woodpecker			res (?)	rare		res	fc		May 27, June 2, 8	res	unc			May 28, June 3, 8							
Arctic three-toed woodpecker						res	unc		June 8	res	unc			4 June '78						tv	fc
Am. three-toed woodpecker			tv	fc		sr	c		yes	sr	c			May 20, June 10	tv, sr	c, fc			yes	1878 (last)	
Yellow-bellied sapsucker						res	unc		yes	res	rare			yes						sr, tv	rare, oc
North. pileated woodpecker						sr, res	c, oc			sr, res	c, oc			yes	sr	fc			yes		rare
Red-headed woodpecker		yes	sr		yes						rare									sr, res	ab, rare
Red-bellied woodpecker						sr	fc		yes	sr	c	Apr. 9, 11	Oct. 15	yes	sr	c	Apr. 20		yes	sr	fc
Northern flicker	Mar. 19, 27	yes	sr	c	yes	sr	local		yes	sr	local			yes	sr	local			yes	sr	c
Whip-poor-will	May 7	yes	sr		yes	sr	unc		yes	sr	c	May 20	Sept. 20	yes	sr	c	May 20		yes	sr	ab
Nighthawk	May 23	yes	sr		yes	sr	c		yes	sr	c	Apr. 25, 26	Sept. 10	yes	sr	c			yes	sr	c
Chimney swift	May 3	yes	sr	c	yes	sr	c		yes	sr	c	May 21	Sept. 16	yes	sr	fc	May 20		yes	sr	c
Ruby-throated hummingbird	May 9	yes	sr		yes	sr	fc		yes	sr	c	May 20	Aug. 29	yes	sr	c			yes		
Kingbird	Apr. 30, May 5	yes	sr		yes																
Gray kingbird																					
Arkansas kingbird																					
Crested flycatcher		yes	sr		yes	sr	unc		yes	sr	c	May 4	Aug. 17	yes	sr	fc	May 12		yes	sr	c
Phœbe	Mar. 30, Apr. 5	yes	sr	c	yes	sr	rare		yes	sr	c	Apr. 12	Sept. 16	yes	sr		Apr		yes	sr	c
Olive-sided flycatcher						sr	fc		June 20, 24, 28	sr				June 18, 23, July 16						tv	rare
Wood pewee		yes	sr	c	yes	sr	c		yes	sr	c	May 13, 21		June 18	sr	c	May 20		yes	sr	c
Yellow-bellied flycatcher			sr		local	sr	unc		June 18, 23, July 12	sr	unc	May 16, 20		June 8, 17, 25						tv	rare
Green-crested flycatcher										sr	local									sr	fc
Alder flycatcher						sr	unc		June 23, 28, July 16	sr	fc			June 21, 25, July 21						sr	rare
Least flycatcher			sr	c		sr	fc		June 5	sr	c	May 3, 6		yes	sr					sr	c
Skylark																				res	local, 1887–98
Horned lark										wv		14 Mar. '84								wv	ab
Hoyt horned lark																				tv	rare
Prairie horned lark		yes				sr	local													tv, sr	oc, rare
Blue jay		yes	res	c	yes	res	c		yes	res	c			yes	res	c			May 12	res	c
Canada jay						res	fc		yes	res	c			yes							
Northern raven						res	rare			res	unc			yes						av	
American crow		yes	res		yes	sr	c		yes	res	c			yes	sr	ab			yes	res	ab
Fish crow																				sr, res	unc, rare
Starling																				res	fc, local
Bobolink	May 3, 6	yes	sr	c	yes	sr	unc		yes	sr	c	May 3, 10		yes	sr	fc	May 12		yes	sr	fc, local
Cowbird	Mar. 29	yes	sr	c	yes	sr	unc		yes	sr	c	Mar. 31, Apr. 2	Sept. 30, Oct. 21	yes	sr	fc			yes	sr, res	c, oc
Yellow-headed blackbird																					
Red-winged blackbird	Feb. 28, Mar. 8	yes	sr	c	yes	sr	unc		yes	sr	c	Apr. 2	Oct.	yes	sr	ab		Oct. 20	yes	sr	ab
Meadowlark	Mar. 29, Apr. 8	yes	sr	c	yes	sr	local			sr	c	Mar. 28, Apr. 10		yes	sr	c	Apr. 8	Oct.	yes	sr, res	c
Orchard oriole			sr		yes					sr	rare	May 15								sr	fc
Baltimore oriole	May 2, 4	yes	sr	c	yes					sr	c	May 2, 5		yes	sr	fc	May 4		yes	sr	c
Bullock oriole																					
Rusty blackbird			tv							sr, tv	local, c	Mar. 28		May 7, 27, June 15	tv	c				tv	c
Purple grackle						sr	unc	Oct. 31	May 10, June 10											sr	c
Bronzed grackle	Mar. 12, 15	yes	sr	c	yes	sr	unc		yes	sr	c	Apr. 1		yes	sr				yes	tv	oc
Evening grosbeak										av		Feb. 20									
Pine grosbeak			wv	oc		wv	oc			wv	rare									wv	
House sparrow		yes	res	ab	yes	res	fc		yes	res	ab			yes	res	ab			yes	res	ab
Chaffinch																					
Greenfinch																					
Purple finch	Apr. 2, 6	yes	tv			sr	c	Oct. 24, 27		sr	c	Apr. 10	Sept. 16	yes	sr	ab			yes	sr, tv, sr	rare, fc, oc
American crossbill			wv	oc		res	c		yes	res, wv	local, irreg			yes						wv	1848–49, 1864
White-winged crossbill						wv, res	fc, rare		yes	res	unc			yes							
Hoary redpoll																				wv	oc
Redpoll			wv	oc		wv	oc			wv	unc										
Holboell redpoll																					
Greater redpoll																					
European linnet																					
American goldfinch		yes	sr	c	yes	sr	c		yes	sr, res	c, oc	Apr. 16, May 4		yes	sr				yes	sr, res	ab, oc
Pine siskin			wv	oc		sr	c, irreg		yes	res	irreg			yes						wv	fc
European goldfinch																					
Snowflake			wv	oc		wv	fc			wv	c				wv	c				wv	c
Lapland longspur										wv	rare									wv	oc
Chestnut-collared longspur																				av	16 Feb. '89
Vesper sparrow		yes	sr	c	yes	sr	fc		yes	sr	c	Apr. 11	Oct 26	yes	sr	c	Apr		yes	sr, res	c, oc
Ipswich sparrow																				wr	fc, local
Savanna sparrow						sr	fc		yes	sr		Apr		yes	sr		Apr		yes	sr, res	c, fc
Baird sparrow																					
Grasshopper sparrow						sr	fc		yes											sr	fc
Henslow sparrow			sr		yes																
Leconte sparrow																					
Sharp-tailed sparrow																				sr, res	c, rare
Nelson sparrow																				tv	rare
Acadian sharp-tailed sparrow																					
Seaside sparrow																				sr	c
Lark sparrow																					
White-crowned sparrow	May 9		tv																	tv	unc
Gambel sparrow										tv	unc	Apr. 29, May 13			tv	oc	May 22				
White-throated sparrow	Apr. 20, 30		tv			tv														tv, wr	ab, rare
Tree sparrow			wv							sr	c	May 4		yes	tv	c				wv	ab
Chipping sparrow	Apr 8, 10	yes	sr	c		sr	c		yes	wv	c	May 4		yes	wv					sr	ab
Field sparrow		yes	sr		yes	tv	c			sr	c	May 4			sr	c	Apr. 21		yes	sr	c
Slate-colored junco			wv	c	yes	sr	fc		yes	sr	c	Apr. 12, 17, May 4	Oct. 1	yes	sr					wv, tv	c, ab
Carolina junco						sr	unc		yes	sr	c	Apr. 12		yes							
Song sparrow	Mar. 5, 10	yes	sr	c	yes	sr	c		yes	res, tv	ab	Mar. 26, May 4	Sept. 30, Oct. 30	May 1, 16, June 1	res, tv	ab			yes	sr, res	c, oc
Lincoln sparrow										sr	c						Mar			tv	rare
Swamp sparrow					yes	sr	fc		yes	sr		Mar. 17, 23, May 4	Oct. 28	yes	sr	c			yes	sr, res	fc, oc
Fox sparrow		yes				sr	unc		June 13, 26	sr				yes	sr	fc				tv, wv	fc, rare
Towhee			tv			sr	fc		yes	tv		Apr 15								sr, res	c, oc
Cardinal		yes	sr	c	yes	tv, Oct				sr	c	Apr. 9	Aug. 31							res	rare
						sr	unc, local				rare										

SPECIES RECORDED	KINGS—QUEENS—NASSAU (*continued*)						
	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	C
Barred owl					yes	res	c.
Great gray owl						av	
Richardson owl							
Saw-whet owl		Feb. 28, Mar. 30	Oct., Nov. 4, 15			res	fc.
Screech owl					yes	res	fc.
Great horned owl						res	c.
Snowy owl		19 May '90	Nov. 23, Dec. 14, Jan. 2			wv	oc
American hawk owl						wv	rar
Burrowing owl							
Carolina paroquet							
Yellow-billed cuckoo	May 21			Sept. 29	yes	sr	un
Black-billed cuckoo	May 3, 11, 17			Sept	yes	sr	c.
Belted kingfisher	Apr. 4, 5			Oct. 4	yes	sr	ab
Hairy woodpecker					yes	res	c.
Downy woodpecker					yes	res	c.
Arctic three-toed woodpecker						res	fc,
Am. three-toed woodpecker						res	rar
Yellow-bellied sapsucker	Apr. 16		Oct. 11, 12, 17			sr	c.
North. pileated woodpecker						res	loc
Red-headed woodpecker	May 12, 17		Sept. 3, 15, 24	Oct. 1, 17	yes	sr, res	c,
Red-bellied woodpecker				1 Oct. '70		av	
Northern flicker	Feb. 24, Mar. 15			Oct. 20, Nov. 5, Dec. 25	Apr. 18, June 13	sr	ab
Whip-poor-will	Apr. 30, May 2, 3			Oct. 6	May 30	sr	c.
Nighthawk	May 10, 12, 27			Oct. 4, 11	yes	sr	c.
Chimney swift	Apr. 24, May 2, 6			Aug. 11, Sept. 4, Oct. 18	yes	sr	ab
Ruby-throated hummingbird	May 10, 12, 24			Sept. 20	yes	sr	c.
Kingbird	May 1, 8			Aug. 30, Sept. 5	June 13	sr	ab
Gray kingbird							
Arkansas kingbird							
Crested flycatcher	May 2, 12, 16			Sept. 25, 26	yes	sr	c.
Phoebe	Mar. 14, 26, Apr. 2			Oct. 2, 12, 24	yes	sr	ab
Olive-sided flycatcher	May 24		Aug. 27, 29	Sept. 1, 27		tv, sr	un
Wood pewee	May 5, 10, 14			Sept. 17, Oct. 6	yes	sr	c.
Yellow-bellied flycatcher	May 19	June 4, 10	Aug. 4, 19, 27	Sept. 2, 18		tv	un
Green-crested flycatcher	May 19				June 10		
Alder flycatcher					yes	sr	fc
Least flycatcher					yes	sr	c.
Skylark					July 2, 28		
Horned lark			Nov. 4, 10			wv	fc
Hoyt horned lark		Mar. 9					
Prairie horned lark	Feb. 28; Mar. 13, 19		July 31, Sept. 14	Dec. 24		sr	fc
Blue jay					yes	res	c.
Canada jay						res	loc
Northern raven			1848			res	loc
American crow					Apr. 24	sr, res	c,
Fish crow	25 Mar. '89			Dec. 30	yes		
Starling					yes		
Bobolink	May 4, 10, 12			Oct. 4, 10	yes	sr	c.
Cowbird	Mar. 16, Apr. 1			11 Jan. '92	May 30	sr	ab
Yellow-headed blackbird							
Red-winged blackbird	Mar. 12, 17			Oct. 28, Dec. 14	yes	sr	ab
Meadowlark	Feb. 28, Mar. 9			Nov. 10	yes	sr	ab
Orchard oriole	May 9, 11				June 9		
Baltimore oriole	May 3, 8, 14			Oct. 25	yes	sr	c.
Bullock oriole							
Rusty blackbird	Mar. 24, Apr. 15, 19	May 8, 23, June 3	Oct. 7, 17, 22	Nov. 4, 20, Dec. 3		tv, sr	c,
Purple grackle	Feb. 20, Mar. 12, 17			Sept. 28, Oct. 20	yes		
Bronzed grackle						sr	ab
Evening grosbeak						av	
Pine grosbeak			1836–37			wv	irr
House sparrow					yes	res	ab
Chaffinch							
Greenfinch						av	on
Purple finch	Feb. 22, Apr. 20, May 1			Oct. 20, Nov. 7		sr, res	c,
American crossbill		Apr. 17, 23, June 1	Dec.			wv, res	irr
White-winged crossbill		18 Jan. '00				wv, res	un
Hoary redpoll							
Redpoll		Mar. 25				wv	c,
Holboell redpoll							
Greater redpoll						av	
European linnet							
American goldfinch	Mar. 2, Apr. 3			Oct. 4, Nov. 24, Dec. 11	yes	sr, res	ab
Pine siskin		Apr.	Oct., Nov. 5			wv, res	c.
European goldfinch							
Snowflake		Mar. 16, 20	Oct. 28, Nov. 12			wv	ab
Lapland longspur		Feb. 7, 28, Apr. 18	Oct. 18, Nov. 26, Dec. 28			wv	
Chestnut-collared longspur							
Vesper sparrow	Apr. 1, 13			Oct. 25, Nov. 10	yes	sr	ab
Ipswich sparrow			Nov. 19				
Savanna sparrow	Apr. 2, 9				yes	sr	c.
Baird sparrow							
Grasshopper sparrow	May 6, 13, 23			Oct. 25	yes		
Henslow sparrow							
Leconte sparrow							
Sharp-tailed sparrow	May 8			Oct. 25	yes		
Nelson sparrow			5 Oct. '07				
Acadian sharp-tailed sparrow							
Seaside sparrow	May 10, 15, 17			Oct.	yes		
Lark sparrow							
White-crowned sparrow		May 13		Oct. 19		tv	c.
Gambel sparrow							
White-throated sparrow	Feb. 20, Mar. 25, Apr. 10	May 20	Oct. 4, 8, 11	Nov. 15, 28, Dec. 6		sr	c.
Tree sparrow		Mar. 23, 26, Apr. 16	Oct. 20			wv	c.
Chipping sparrow	Mar. 30, Apr. 18, 27			Sept. 12, Oct. 26, Nov. 5	yes	sr	ab
Field sparrow	Apr. 5, 15, 20			Oct. 26, 30, Nov. 5	May 30, June 11	sr	lo
Slate-colored junco		Oct. 15, 6	Apr. 24			sr	c.
Carolina junco							
Song sparrow	Feb. 3, 24, Mar. 7			Nov. 3, Dec. 12, 25	May 30, Apr. 14	sr	ab
Lincoln sparrow			Sept. 28				ur
Swamp sparrow	Feb. 24, Mar. 23, May 7			Oct. 11, 22, 28	yes	tv, sr	c.
Fox sparrow	Feb. 22, Mar. 12, 26	Apr. 4	Oct. 12, 16, 24	Nov. 15, 20, Dec. 25		tv	fc
Towhee	Apr. 22, May 5, 16			Oct. 20, 25, Nov. 3	May 23		ra
Cardinal					June 8		

LEWIS					LIVINGSTON			
Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north
				yes	res			
		17 Dec. '89						
				yes				
				yes	res	c		
				yes	res	fc		
		Oct., Nov			wv	oc		
		Oct. 24, Nov. 16						
				yes	sr			
, 23			Aug. 9, 23, Oct. 16	yes	sr			
, 20			Sept. 4, Oct. 6, 18	yes	sr			
				yes	res	fc		
				yes	res	c		
				yes				
				yes				
, 17			Aug. 24, Sept. 18, Oct. 1	yes	tv	c		
				yes				
, 26			Sept. 6	yes	sr, res	fc, oc		
		winter, 1871						
, 25			Oct. 4, 10	yes	sr, res	c, oc		
, 17				yes	sr			
lay 6, 22			Aug. 26, Sept. 1, 4	yes	sr		May 20	
lay 9, 10			Aug. 22, Sept. 3	yes	sr	ab	May 1	
, 19			Sept. 1, 15, 20	yes	sr	c	May 10	
16			Sept. 2, 10, 12	yes	sr	fc	May 1	
12			Aug. 26, Sept. 7, 13	yes	sr	c	May 5	
pr. 2, 9			Sept. 10, Oct. 6, 18	yes	sr	c	Mar. 15, Apr. 8	
2, 27			July 27, Aug. 20	yes				
8, 21			Aug. 26, Sept. 10, 23	yes	sr	c	May 5	
6								
lay 6, 10			Aug. 16, Sept. 2	yes	sr			
				yes	sr	c		
				yes	res	fc		
				yes				
				yes				
, Mar. 2			Nov. 10, 18	yes	res	c		
13			Aug. 20, Sept. 1, 2	yes	sr	c	May 10	
pr. 3, 30			Oct. 4, 24	yes	sr	c	Apr. 10	
r. 2, 20			Aug. 8, Nov. 1, 20	yes	sr	ab	Mar. 25	
pr. 10, 20			Oct. 2, 21, Dec. 23	yes	sr, res	c, oc	Apr. 10	
					sr	rare	May 13	
10			Aug. 30, Sept. 6, 15	yes	sr	c	May 9	
pr. 1			Sept., Oct. 16, Nov. 3	yes	tv		Mar. 20, Apr. 20	
, Apr. 6			Aug. 12, Sept., Oct. 13	yes	sr	c	Mar. 19	
		Feb. '96						
	Feb. 28, Mar. 1	Oct. 29, Dec. 17, 23						
				yes	res	ab		
pr. 18, 22			Oct. 14, 28	yes	sr	unc		
				yes				
		Nov. 11, 14			wv	oc		
pr. 11, May 10			Oct., Nov. 16	yes	sr	c	Apr. 26	
r. 1, Apr. 18	Apr. 5, May 20	Sept	Nov	yes, irreg., Mr. '78	wv			Apr
	Mar. 28, 30	Nov. 14, Dec. 1, 11			wv			
20			Oct. 18, Nov. 3	yes	sr	c		
6, 27			Sept. 17, Oct. 4, 23	yes				
12	May 18, 25	Sept. 23, 28, Oct. 5	Oct. 2, 16		tv			
pr. 17, May 2			Oct. 3, 25, Nov. 3	yes	tv	c	Apr. 25	
ar., Apr. 9	Apr. 25, May 2	Oct. 13, 23	Nov. 8, 14		wv	ab		Apr. 15
8, 24			Sept. 26, Oct. 16, 23	yes	sr	ab	Apr. 5	
					sr	c	Apr. 15	
pr. 3, 9			Nov. 4, Dec. 9	yes	tv, wv	ab, fc		Apr. 25
, Apr. 10			Oct. 16, 21, 23	yes	sr, res	ab, oc		
	May 23							
16			Aug. 4, 29	yes	sr			
pr. 14	Apr. 17, May 9		Oct		tv			
			30 Sept. '87		sr	local	Apr	
					av			

SPECIES RECORDED	KINGS—QUEENS—NASSAU (continued)					LEWIS							LIVINGSTON			
	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north
Barred owl					yes	res	c					yes	res			
Great gray owl						av				17 Dec. '89						
Richardson owl																
Saw-whet owl		Feb. 28, Mar. 30	Oct., Nov. 4, 15			res	fc					yes				
Screech owl					yes	res	fc					yes	res	c		
Great horned owl						res	c					yes	res	fc		
Snowy owl		19 May '90	Nov. 23, Dec. 14, Jan. 2			wv	oc			Oct., Nov.			wv	oc		
American hawk owl						wv	rare			Oct. 24, Nov. 16						
Burrowing owl																
Carolina parroquet																
Yellow-billed cuckoo	May 21			Sept. 29	yes	sr	unc	June 5				yes	sr			
Black-billed cuckoo	May 3, 11, 17			Sept.	yes	sr	c	May 9, 12, 23			Aug. 9, 23, Oct. 16	yes	sr			
Belted kingfisher	Apr. 4, 5			Oct. 4	yes	sr	ab	Apr. 2, 13, 20			Sept. 4, Oct. 6, 18	yes	sr			
Hairy woodpecker					yes	res	c					yes	res	fc		
Downy woodpecker					yes	res	c					yes	res	c		
Arctic three-toed woodpecker						res	rc, local					yes				
Am. three-toed woodpecker						res	rare					yes				
Yellow-bellied sapsucker	Apr. 16		Oct. 11, 12, 17			sr	c	Apr. 2, 13, 17			Aug. 24, Sept. 18, Oct. 1	yes	tv			
North. pileated woodpecker						res	local					yes				
Red-headed woodpecker	May 12, 17		Sept. 3, 15, 24	Oct. 1, 17	yes	sr, res	c, oc	May 7, 11, 20			Sept 6	yes	sr, res	fc, oc		
Red-bellied woodpecker				1 Oct. '79		av				winter, 1871						
Northern flicker	Feb. 24, Mar. 15			Oct. 20, Nov. 5, Dec. 25	Apr. 18, June 13	sr	ab	Apr. 2, 13, 25			Oct. 4, 10	yes	sr, res	c, oc		
Whip-poor-will	Apr. 30, May 2, 3			Oct. 6	May 30	sr	c	May 3, 10, 17				yes	sr			
Nighthawk	May 10, 12, 27			Oct. 4, 11	yes	sr	c	Apr. 13, May 6, 22			Aug. 26, Sept. 1, 4	yes	sr		May 20	
Chimney swift	Apr. 24, May 2, 6			Aug. 11, Sept. 4, Oct. 18	yes	sr	ab	Apr. 28, May 9, 10			Aug. 22, Sept. 3	yes	sr	ab	May 1	
Ruby-throated hummingbird	May 10, 12, 24			Sept. 20	yes	sr	c	May 7, 11, 19			Sept. 1, 15, 20	yes	sr	c	May 10	
Kingbird	May 1, 8			Aug. 30, Sept. 5	June 13	sr	ab	May 3, 9, 16			Sept. 2, 10, 12	yes	sr	fc	May 1	
Gray kingbird																
Arkansas kingbird																
Crested flycatcher	May 2, 12, 16			Sept. 25, 26	yes	sr	c	May 3, 8, 12			Aug. 26, Sept. 7, 13	yes	sr		May 5	
Phœbe	Mar. 14, 26, Apr. 2			Oct. 2, 12, 24	yes	sr	ab	Mar. 31, Apr. 2, 9			Sept. 10, Oct. 6, 18	yes	sr	c	Mar. 15, Apr. 8	
Olive-sided flycatcher	May 24		Aug. 27, 29	Sept. 1, 27		tv, sr	unc, local	May 11, 22, 27			July 27, Aug. 20	yes				
Wood pewee	May 5, 10, 14			Sept. 17, Oct. 6	yes	sr	c	May 11, 18, 21			Aug. 26, Sept. 10, 21	yes	sr	c	May 5	
Yellow-bellied flycatcher	May 10	June 4, 12	Aug. 4, 19, 27	Sept. 2, 18		tv	unc	May 22, 26								
Green-crested flycatcher	May 19				June 10											
Alder flycatcher					yes	sr	fc	May 9								
Least flycatcher					yes	sr	c	Apr. 25, May 6, 10			Aug. 16, Sept. 2	yes	sr			
Skylark					July 2, 28											
Horned lark			Nov. 4, 10			wv	fc									
Hoth horned lark		Mar 9														
Prairie horned lark	Feb 28; Mar. 13, 19		July 31, Sept. 14	Dec. 24		sr	fc					yes	sr			
Blue jay					yes	res	c					yes	res			
Canada jay						res	local					yes				
Northern raven			1848			res	local					yes				
American crow					Apr. 24	sr, res	c, oc	Feb. 4, 16, Mar 2			Nov. 10, 18	yes	res	c		
Fish crow	25 Mar. '89			Dec. 30	yes											
Starling					yes											
Bobolink	May 4, 10, 12			Oct. 4, 10	yes	sr	c	May 7, 10, 13			Aug. 20, Sept. 1, 2	yes	sr	c	May 1	
Cowbird	Mar. 16, Apr. 1			11 Jan. '92	May 30	sr	ab	Mar. 18, Apr. 3, 10			Oct. 4, 24	yes	sr	c	Apr. 1	
Yellow-headed blackbird																
Red-winged blackbird	Mar 12, 17			Oct. 28, Dec. 14	yes	sr	ab	Mar. 7, Apr. 2, 20			Aug. 8, Nov. 1, 20	yes	sr	ab	Mar. 25	
Meadowlark	Feb. 28 Mar. 9			Nov. 10	yes	sr	ab	Mar. 27, Apr. 10, 20			Oct. 2, 21, Dec. 23	yes	sr, res	c, oc	Apr. 12	
Orchard oriole	May 9, 11				June 9								sr	rare	May 19	
Baltimore oriole	May 3, 8, 14			Oct. 25	yes	sr	c	May 2, 8, 10			Aug. 30, Sept. 6, 15	yes	sr	c	May 9	
Bullock's oriole																
Rusty blackbird	Mar. 24, Apr 15, 19	May 8, 23, June 5	Oct 7, 17, 22	Nov. 4, 20, Dec. 3		tv, sr	c, local	Mar. 20, Apr. 1			Sept., Oct. 16, Nov. 3	yes	tv		Mar. 20, Apr	
Purple grackle	Feb. 20, Mar. 12, 17			Sept. 28, Oct. 20	yes											
Bronzed grackle						sr	ab	Mar. 5, 28, Apr. 6			Aug. 12, Sept., Oct 13	yes	sr		Mar. 19	
Evening grosbeak						av				Feb. '96						
Pine grosbeak			1836–37			wv	arrog		Feb. 28, Mar. 1	Oct. 29, Dec. 17, 23		yes	res	ab		
House sparrow					yes	res	ab									
Chaffinch																
Greenfinch						av	one									
Purple finch	Feb. 22, Apr 20, May 1			Oct. 20, Nov. 7		sr, res	c, oc	Mar. 21, Apr. 18, 22			Oct. 14, 28	yes	sr	unc		
American crossbill		Apr 17, 23, June 1	Dec			wv, res	irreg or									
White-winged crossbill		18 Jan. '05				wv, res	unc, local					yes				
Hoary redpoll																
Redpoll		Mar 25				wv	c, irreg			Nov. 11, 14			wv	oc		
Holbœll redpoll																
Greater redpoll						av										
European linnet																
American goldfinch	Mar 1, Apr. 3					sr	ab, oc	Feb 18, Apr. 11, May 10			Oct., Nov. 10	yes	sr		Apr. 26	
Pine siskin		Apr	Oct., Nov. 5	Oct 4, Nov 24, Dec. 11	yes	sr, res	c, oc	Feb. 9, Mar. 1, Apr. 18	Apr. 5, May 20	Sept	Nov	yes, arrive Mr. '78	wv			Apr
European goldfinch						wv, res										
Snowflake		Mar. 10, 20	Oct. 28, Nov. 12				ab		Mar. 28, 30	Nov. 14, Dec. 1, 11			wv			
Lapland longspur		Feb 7, 28, Apr. 18	Oct. 18, Nov. 26, Dec. 28			wv										
Chestnut-collared longspur						wv										
Vesper sparrow	Apr 1, 13										Oct. 18, Nov. 3	yes	sr	c		
Ipswich sparrow				Oct. 25, Nov. 10	yes	sr	ab	Apr. 2, 6, 20								
Savanna sparrow	Apr 2, 9		Nov. 19								Sept. 17, Oct. 4, 23	yes				
Baird sparrow					yes	sr	c	Apr. 13, 26, 27								
Grasshopper sparrow	May 6, 13, 24			Oct 25	yes											
Henslow sparrow																
Leconte sparrow																
Sharp-tailed sparrow	May 8															
Nelson sparrow																
Acadian sharp-tailed sparrow			5 Oct. '07	Oct 25	yes											
Seaside sparrow	May 10, 15, 17															
Lark sparrow				Oct	yes											
White-crowned sparrow		May 13														
Gambel sparrow				Oct 19		tv	c	May 5, 9, 12	May 18, 25	Sept. 23, 28, Oct. 5	Oct 2, 16		tv			
White-throated sparrow	Feb. 20, Mar 25, Apr. 10	May 20	Oct 4, 8, 11												Apr 25	
Tree sparrow		Mar 23, 26, Apr 10	Oct 20	Nov. 15, 28, Dec 6		sr	c	Mar. 20, Apr. 17, May 2			Oct 3, 25, Nov 5	yes	vx	ab		Apr 15
Chipping sparrow	Mar 10, Apr 18, 27					av	c	Feb. 8, Mar., Apr 9	Apr. 25, May 2	Oct. 11, 21	Nov 8, 14		r	ab	Apr 5	
Field sparrow	Apr 5, 15, 20			Sept 12, Oct 26, Nov. 5		sr	ab	Apr. 12, 18, 24			Sept 26, Oct 16, 23	yes	sr	c	Apr 15	
Slate-colored junco		Oct 15, 6	Apr 21	Oct. 26, 30, Nov. 5	May 30, June 11	sr	local						tv, w	ab, fc		Apr 25
Carolina junco						sr	c	Mar. 26, Apr. 3, 9			Nov 4, Dec 9	yes	sr, res	ab, oc		
Song sparrow	Feb 3, 24, Mar 7			Nov. 3, Dec 12, 25	May 10, Apr. 14	sr	ab	Mar. 8, 20, Apr. 10			Oct 16, 21, 23	yes				
Lincoln sparrow			Sept 28				unc		May 23				r			
Swamp sparrow	Feb 24 Mar 23 May 7			Oct. 11, 22 28	yes	tv, sr	r, local	May 2, 6, 16			Aug 4, 20	yes	tv			
Fox sparrow	Feb 22 Mar 12, 26	Apr. 4	Oct 12, 20, 24	Nov. 15, 22 Dec 25		tv	fc	Mar. 31, Apr. 14	Apr. 17, May 9		Oct		sr	local	Apr	
Towhee	Apr 22, May 5, 16			Oct. 27, 25, Nov 3	May 23		rare	May 9			13 Sept '8		av			
Cardinal					June 8											

SPECIES RECORDED	LIVINGSTON (*continued*)			MADISON						
	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	
Barred owl			yes	res						
Great gray owl										
Richardson owl										
Saw-whet owl					rare					
Screech owl			yes	res	c					ye
Great horned owl			Mar	res	unc					ye
Snowy owl				wv	oc			11 Nov. '85		
American hawk owl										
Burrowing owl										
Carolina paroquet										
Yellow-billed cuckoo			yes	sr	fc	May 12			Sept. 18	ye
Black-billed cuckoo			yes	sr	fc	May 10			Sept. 23	ye
Belted kingfisher			yes	sr	c	Apr. 15			Oct. 20	ye
Hairy woodpecker				res	c					ye
Downy woodpecker			yes	res	c					ye
Arctic three-toed woodpecker				wv	once			fall, 1899		
Am. three-toed woodpecker										
Yellow-bellied sapsucker				tv, sr	ab, rare	Apr. 15, 20	May 10		Oct. 10	
North. pileated woodpecker					rare					
Red-headed woodpecker			yes	sr, res	c, oc					ye
Red-bellied woodpecker					rare		17 Feb. '86	Dec. '85		
Northern flicker			yes	sr	ab	Apr. 13			Oct. 9	ye
Whip-poor-will			yes	tv	local				Sept. 25	
Nighthawk		Aug. 20, Sept. 10	yes	tv, sr	c, local				Aug. 23	ye
Chimney swift			yes	sr	ab	Apr. 17, 23			Sept. 18	ye
Ruby-throated hummingbird		Sept. 15	yes	sr	c	May 15			Sept. 8	ye
Kingbird			yes	sr	c	May 1			Sept. 25	ye
Gray kingbird										
Arkansas kingbird										
Crested flycatcher		Sept. 25	yes	sr	c	May 5			Sept. 5, 18	ye
Phoebe		Oct. 12	yes	sr	ab	Apr. 4			Oct. 2, 10	ye
Olive-sided flycatcher				sr	local					ye
Wood pewee		Sept. 15	yes	sr	c	May 3			Sept. 29	ye
Yellow-bellied flycatcher				sr, tv	unc, c	May 5		Aug. 24	Sept. 29	
Green-crested flycatcher										
Alder flycatcher				sr	fc	May 12			Sept. 1	ye
Least flycatcher			yes	sr	ab	May 1			Sept. 5, 18	ye
Skylark										
Horned lark				wv		Feb. 10	Mar. 10			
Hoyt horned lark										
Prairie horned lark			yes	sr, res	c, oc	Feb. 10			Nov. 6	ye
Blue jay			yes	res	c					ye
Canada jay										
Northern raven										
American crow			yes	res	ab					ye
Fish crow										
Starling										
Bobolink			yes	sr	ab	May 1, 6			Sept. 18	ye
Cowbird		Oct. 15	yes	sr	c	Mar. 20, 30			Nov. 1, 29	ye
Yellow-headed blackbird										
Red-winged blackbird			yes	sr	ab	Mar. 20			Oct. 25	ye
Meadowlark			yes	sr, res	ab, oc	Apr. 5				ye
Orchard oriole			yes	sr	rare	May				Ma
Baltimore oriole			yes	sr	c	May 6, Apr. 30			Sept. 19	ye
Bullock oriole										
Rusty blackbird				tv	ab, fall			Sept. 20	Nov. 29	
Purple grackle										
Bronzed grackle			yes	sr	c	Mar. 10, Apr. 1				ye
Evening grosbeak				wv			20 Feb. '90			
Pine grosbeak				wv	oc		Feb. 6			
House sparrow			yes	res	ab					ye
Chaffinch										
Greenfinch										
Purple finch				sr	c	Apr. 11			July 1	ye
American crossbill				wv	oc		May 15	13 July '03		
White-winged crossbill				wv	rare		20 Mar. '00			
Hoary redpoll										
Redpoll				wv	c		Mar. 2	Feb. 28		
Holboell redpoll										
Greater redpoll										
European linnet										
American goldfinch			yes	sr, res	ab, oc					ye
Pine siskin	Oct.			tv	irreg	1 Mar. '02	27 June '02			
European goldfinch										
Snowflake				wv	c		Mar. 5	Dec. 5		
Lapland longspur										
Chestnut-collared longspur										
Vesper sparrow			yes	sr	ab	Apr. 5			Oct. 10	ye
Ipswich sparrow										
Savanna sparrow				sr	ab	Apr. 8			Oct.	ye
Baird sparrow										
Grasshopper sparrow				sr	local					ye
Henslow sparrow										
Leconte sparrow										
Sharp-tailed sparrow										
Nelson sparrow				tv	rare			Oct. 8	Oct. 17	
Acadian sharp-tailed sparrow				tv	rare			Oct. 8		
Seaside sparrow										
Lark sparrow										
White-crowned sparrow				tv	fc	May 2, 5	May 20, 25	Sept. 25	Oct. 5	
Gambel sparrow										
White-throated sparrow		Oct. 25		tv, sr	c, unc	Apr. 30	May 18, 25	Sept. 20	Oct. 15, Nov. 2	
Tree sparrow	Oct. 15			wv, tv	unc, ab		May 5	Oct. 10		
Chipping sparrow		Oct. 15	yes	sr	ab	Apr. 15				ye
Field sparrow		Oct. 30	yes	sr	c, fc	Apr. 16, 21				ye
Slate-colored junco	Oct. 15			tv, sr, wv	ab, unc, c		May 6, 10	Oct. 1		ye
Carolina junco										
Song sparrow			yes	sr, res	ab, oc	Feb. 25, Mar. 10				ye
Lincoln sparrow				tv	rare					
Swamp sparrow			yes	sr	c	Apr. 20			Oct. 25, Dec. 1	ye
Fox sparrow				tv	c	Apr. 25	May 10	Oct. 8	Nov. 25, Dec. 3	
Towhee		Oct. 25	yes	sr	local	May 7			Oct. 17	ye
Cardinal										

	MONROE							MONTGOMERY		
dent r sient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds		Resident or transient	Common or rare	Breeds
	unc					yes		res		
	rare, unc		May 14	Nov		yes				
	c					yes		res	fc	yes
	unc					yes		res		
	oc		Mar. 11	Nov. 20, Dec. 10				wv		
	rare			Nov. '90						
	fc	May 7, 12			Oct. 9	yes		sr		
	fc	May 8, 15			Sept. 13	yes		sr		
	c	Mar. 27, Apr. 6			Oct. 20, Nov. 15	yes		sr		
	fc					yes		res		
	c					yes		res		
	c	Apr. 2, 9	May 9, 20					tv		
	fc, oc	May 4, 7			Oct.	yes		sr		
	oc, irreg					? yes				
	ab	Mar. 21, Apr. 7				yes		sr	c	yes
	local, fc	Apr. 29, May 2, 4				yes				
	fc	May 8, 10, 15			Sept. 20	yes		sr		
	ab	Apr. 23, 26, 30			Sept. 25	yes		sr	c	yes
	c	May 3, 5, 10			Sept. 5, 10	yes		sr	c	yes
	c	Apr. 28, May 3, 8			Sept	yes		sr	c	yes
	c	Apr. 29, May 2, 5			Sept	yes		sr	c	yes
	ab	Mar. 20, 26, Apr. 3			Oct. 10	yes		sr	c	yes
	unc	May 3, 12, 17	May 19, 26							
	ab	May 6, 9, 14			Sept	yes		sr	c	yes
	unc	May 9, 13, 19	May 22, June 1							
	rare	30 May '95			Aug. 14, 18	yes		sr	rare, 5 June '85	
	fc, oc	May 8				yes				
	c	Apr. 27, May 2, 8				yes		sr		yes
	fc		Feb. 22, Mar. 20	Dec						
es	c, ab, oc	Jan. 20, Feb. 6, 10			Nov. 20	Mar. 10, 30		sr		yes
	unc, fc					yes		res		yes
	rare, 3 times									
	ab					yes		res	c	yes
	c	Apr. 29, May 4, 8				yes		sr		yes
	c	Mar. 19, 23, 26			Oct. 30	yes		sr		yes
	once			15 Sept. '98						
	ab	Feb. 24, Mar. 6, 17				yes		sr	c	yes
	c, oc	Mar. 2, 12, 18				yes		sr	c	yes
	rare	May 7				yes				
	ab	Apr. 25, May 1, 4			Sept. 15	yes		sr	c	yes
	ab, fall	Mar. 30, Apr. 5	May 5	Sept. 20	Nov			tv		
	ab	Feb. 26, Mar. 1, 18			Oct.	yes		sr	c	yes
	rare		29 Jan. '90	30 Dec. '89						
	oc		Mar. 21	Nov				wv		
	ab					yes		res	ab	yes
	fc, c	Mar. 4, 17, Apr. 1			Oct.	yes		sr		
	rare	Feb., Mar. 27	Apr. 15, May 10	6, 22 July '03				wv		
	rare									
	irreg		Mar. '90, 18 Mar. '07	Nov. '06				wv		
	ab, oc					yes		sr	ab	yes
	oc	Apr. 24	May 10					tv		
	c		Mar. 11, 26	Nov				wv		
	rare									
	ab	Mar. 18, 26, Apr. 1				yes		sr	c	yes
	fc	Mar. 26, 29, Apr. 4				yes		sr		yes
	local	May 6, 16				yes				
	rare									
	unc			Sept. '94						
	c	Apr. 27, May 2, 5	May 19, 22	Sept. 25	Oct. 15			tv		
	ab	Apr. 14, 18, 24	May 22, 24, June 2	Sept. 11, 15	Oct. 16, Dec. 8			tv	c	
	c		Apr. 20, May 1	Sept. 20, Oct. 10				wv	c	
	ab	Mar. 27, Apr. 5, 8			Oct. 16	yes		sr	c	
	c	Mar. 21, 28, Apr. 1			Oct. 15	yes		sr		
	ab, fc		May 8, 14, 23	Sept. 11, Oct. 4				tv, wv	c	
	ab, oc	Feb. 21, 28, Mar. 10			Nov. 15, Dec. 3	yes		sr	ab	
	unc	May 3, 4	May 11, 13							
	c	Apr. 5, 10			Nov. 10	yes		sr	local	
	fc	Mar. 21, 29, Apr. 5	Apr. 28, May 3	Sept. 25, Oct. 2	Oct. 12, 20, Nov. 4			tv		
	fc	Apr. 15, 22, 29			Oct. 10	yes				

SPECIES RECORDED	LIVINGSTON (*continued*)			MADISON						
	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds
Barred owl			yes	res						
Great gray owl										
Richardson owl										
Saw-whet owl					rare					
Screech owl			yes	res	c					
Great horned owl			Mar	res	unc					yes
Snowy owl				wv	oc			11 Nov. '85		yes
American hawk owl										
Burrowing owl										
Carolina parroquet										
Yellow-billed cuckoo			yes	sr	fc	May 12			Sept. 18	yes
Black-billed cuckoo			yes	sr	fc	May 10			Sept. 23	yes
Belted kingfisher			yes	sr	c	Apr. 15			Oct. 20	yes
Hairy woodpecker				res	c					yes
Downy woodpecker			yes	res	c					yes
Arctic three-toed woodpecker				wv	once			fall, 1899		
Am. three-toed woodpecker										
Yellow-bellied sapsucker				tv, sr	ab, rare	Apr. 15, 20	May 10		Oct 10	
North. pileated woodpecker					rare					
Red-headed woodpecker			yes	sr, res	c, oc					yes
Red-bellied woodpecker					rare		17 Feb. '86	Dec. '85		
Northern flicker			yes	sr	ab	Apr. 13			Oct. 9	yes
Whip-poor-will			yes	tv	local				Sept. 25	
Nighthawk		Aug. 20, Sept. 10	yes	tv, sr	c, local				Aug. 23	yes
Chimney swift			yes	sr	ab	Apr. 27, 23			Sept. 18	yes
Ruby-throated hummingbird		Sept. 15	yes	sr	c	May 15			Sept. 8	yes
Kingbird			yes	sr	c	May 1			Sept. 25	yes
Gray kingbird										
Arkansas kingbird										
Crested flycatcher		Sept 25	yes	sr	c	May 5			Sept. 5, 18	yes
Phoebe		Oct. 12	yes	sr	ab	Apr. 4			Oct. 2, 10	yes
Olive-sided flycatcher				sr	local					yes
Wood pewee		Sept. 15	yes	sr	c	May 3			Sept. 29	yes
Yellow-bellied flycatcher				sr, tv	unc, c	May 5		Aug. 24	Sept. 29	
Green-crested flycatcher										
Alder flycatcher				sr	fc	May 13			Sept. 1	yes
Least flycatcher			yes	sr	ab	May 1			Sept. 5, 18	yes
Skylark										
Horned lark				wv		Feb. 10	Mar. 10			
Hoyt horned lark										
Prairie horned lark			yes	sr, res	c, oc	Feb. 10				
Blue jay			yes	res	c				Nov. 6	yes
Canada jay										yes
Northern raven										
American crow			yes	res	ab					
Fish crow										yes
Starling										
Bobolink			yes	sr	ab	May 1, 6			Sept. 18	yes
Cowbird		Oct. 15	yes	sr	c	Mar. 20, 30			Nov. 1, 29	yes
Yellow-headed blackbird										
Red-winged blackbird			yes	sr	ab	Mar. 20			Oct. 25	yes
Meadowlark			yes	sr, res	ab, oc	Apr. 5				yes
Orchard oriole			yes	sr	rare	May				yes
Baltimore oriole			yes	sr	c	May 6, Apr. 30			Sept. 19	yes
Bullock oriole										
Rusty blackbird				tv	ab, fall			Sept. 20	Nov. 29	
Purple grackle										
Bronzed grackle			yes	sr	c	Mar. 10, Apr. 1				
Evening grosbeak				wv			20 Feb. '90			yes
Pine grosbeak				wv	oc		Feb. 6			
House sparrow			yes	res	ab					yes
Chaffinch										
Greenfinch										
Purple finch				sr	c	Apr. 11			July 1	yes
American crossbill				wv	oc		May 15	13 July '03		
White-winged crossbill				wv	rare		20 Mar. '00			
Hoary redpoll										
Redpoll				wv	c		Mar. 2	Feb. 28		
Holboell redpoll										
Greater redpoll										
European linnet										
American goldfinch										
Pine siskin	Oct.		yes	sr, res	ab, oc					
European goldfinch				tv	irreg	1 Mar. '02				yes
Snowflake							27 June '02			
Lapland longspur				wv	c		Mar. 5	Dec. 5		
Chestnut-collared longspur										
Vesper sparrow										
Ipswich sparrow			yes	sr	ab	Apr. 5			Oct. 10	yes
Savanna sparrow										
Baird sparrow				sr	ab	Apr. 8			Oct.	yes
Grasshopper sparrow										
Henslow sparrow				sr	local					yes
Leconte sparrow										
Sharp tailed sparrow										
Nelson sparrow										
Acadian sharp-tailed sparrow				tv	rare					
Seaside sparrow				tv	rare			Oct. 8	Oct. 17	
Lark sparrow								Oct. 8		
White-crowned sparrow										
Gambel sparrow										
White-throated sparrow				tv	fc	May 2, 5				
Tree sparrow		Oct. 25					May 20, 25	Sept. 25	Oct. 5	
Chipping sparrow	Oct. 15			tv, sr	c, unc	Apr. 30				
Field sparrow		Oct 15	yes	wv, tv	unc, ab		May 18, 25	Sept. 20	Oct. 15, Nov. 2	
Slate-colored junco		Oct 30	yes	sr	ab	Apr. 15	May 5	Oct. 10		
Carolina junco	Oct. 15			sr	c, fc	Apr. 10, 21				
Song sparrow				tv, sr, wv	ab, unc, c					yes
Lincoln sparrow							May 6, 10	Oct. 1		
Swamp sparrow			yes	sr, res	ab, oc	Feb. 25, Mar. 10				
Fox sparrow				tv	rare					
Towhee			yes	sr	c	Apr. 20				
Cardinal		Oct. 25		tv	c	Apr. 25			Oct. 25, Dec. 1	yes
			yes	sr	local	May 7	May 10	Oct. 8	Nov. 25, Dec. 3	
									Oct. 17	yes

SPECIES RECORDED	MONROE							MONTGOMERY		
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Breeds
Barred owl	res	unc					yes	res		
Great gray owl										
Richardson owl										
Saw-whet owl										
Screech owl	res, wv	rare, unc		May 14	Nov		yes			
Great horned owl	res	c					yes	res	fc	yes
Snowy owl	res	unc					yes	res		
American hawk owl	wv	oc		Mar. 11	Nov. 20, Dec 10			wv		
Burrowing owl	wv	rare			Nov. '90					
Carolina parroquet										
Yellow-billed cuckoo	sr	fc	May 7, 12			Oct 9	yes	sr		
Black-billed cuckoo	sr	fc	May 8, 15			Sept. 13	yes	sr		
Belted kingfisher	sr	c	Mar. 27, Apr. 6			Oct. 20, Nov. 15	yes	sr		
Hairy woodpecker	res	fc					yes	res		
Downy woodpecker	res	c					yes	res		
Arctic three-toed woodpecker										
Am. three-toed woodpecker										
Yellow-bellied sapsucker	tv	c	Apr. 2, 9	May 9, 20				tv		
North. pileated woodpecker										
Red-headed woodpecker	sr, res	fc, oc	May 4, 7			Oct.	yes	sr		
Red-bellied woodpecker	res, wv	oc, irreg					7 yes			
Northern flicker	sr	ab	Mar. 21, Apr. 7				yes	sr	c	yes
Whip-poor-will	sr, tv	local, fc	Apr. 29, May 2, 4				yes			
Nighthawk	sr	fc	May 8, 10, 15			Sept 20	yes	sr		
Chimney swift	sr	ab	Apr. 23, 26, 30			Sept. 25	yes	sr	c	yes
Ruby-throated hummingbird	sr	c	May 3, 5, 10			Sept 5, 10	yes	sr	c	yes
Kingbird	sr	c	Apr. 28, May 3, 8			Sept	yes	sr	c	yes
Gray kingbird										
Arkansas kingbird										
Crested flycatcher	sr	c	Apr. 29, May 2, 5			Sept	yes	sr	c	yes
Phoebe	sr	ab	Mar. 20, 26, Apr. 3			Oct 10	yes	sr	c	yes
Olive-sided flycatcher	tv	unc	May 3, 12, 17	May 19, 26						
Wood pewee	sr	ab	May 6, 9, 14			Sept	yes	sr	c	yes
Yellow-bellied flycatcher	tv	unc	May 9, 13, 19	May 22, June 1						
Green-crested flycatcher	sr	rare	30 May '95			Aug. 14, 18	yes	sr	rare, 5 June '85	
Alder flycatcher	tv, sr	fc, oc	May 8				yes			
Least flycatcher	sr	c	Apr. 27, May 2, 8				yes	sr		yes
Skylark										
Horned lark	wv	fc		Feb. 22, Mar. 20	Dec					
Hoyt horned lark										
Prairie horned lark	sr, tv, res	c, ab, oc	Jan. 20, Feb. 6, 10			Nov. 20	Mar. 10, 30	sr		yes
Blue jay	res, tv	unc, fc					yes	res		yes
Canada jay										
Northern raven	wv	rare, 3 times								
American crow	res	ab					yes	res	c	yes
Fish crow										
Starling										
Bobolink	sr	c	Apr. 20, May 4, 8				yes	sr		yes
Cowbird	sr	c	Mar. 19, 23, 26			Oct. 30	yes	sr		yes
Yellow-headed blackbird	av	once			15 Sept. '98					
Red-winged blackbird	sr	ab	Feb. 24, Mar. 6, 17				yes	sr	c	yes
Meadowlark	sr, res	c, oc	Mar. 2, 12, 18				yes	sr	c	yes
Orchard oriole	sr	rare	May 7				yes			
Baltimore oriole	sr	ab	Apr. 25, May 1, 4			Sept. 15	yes	sr	c	yes
Bullock oriole										
Rusty blackbird	tv	ab, fall	Mar. 30, Apr. 5	May 5	Sept. 20	Nov		tv		
Purple grackle										
Bronzed grackle	sr	ab	Feb. 26, Mar. 1, 18			Oct	yes	sr	c	yes
Evening grosbeak	wv	rare		29 Jan. '90	30 Dec '89					
Pine grosbeak	wv	oc		Mar 21	Nov			wv		
House sparrow	res	ab					yes	res	ab	yes
Chaffinch										
Greenfinch	sr, tv	fc, c	Mar. 4, 17, Apr. 1			Oct	yes	sr		
Purple finch	irreg, v	rare	Feb., Mar. 27	Apr. 15, May 10	6, 22 July '03			wv		
American crossbill	wv	rare								
White-winged crossbill										
Hoary redpoll	wv	irreg		Mar. '90, 18 Mar. '07	Nov. '06			wv		
Redpoll										
Holboell redpoll										
Greater redpoll										
European linnet										
American goldfinch										
Pine siskin	sr, res	ab, oc					yes	sr	ab	yes
European goldfinch	tv	oc	Apr. 24	May 10				tv		
Snowflake										
Lapland longspur	wv	c		Mar. 11, 26	Nov			wv		
Chestnut-collared longspur	wv	rare								
Vesper sparrow										
Ipswich sparrow	sr	ab	Mar. 18, 26, Apr. 1				yes	sr	c	yes
Savanna sparrow										
Baird sparrow	sr	fc	Mar. 26, 29, Apr. 4				yes	sr		yes
Grasshopper sparrow										
Henslow sparrow	sr	local	May 6, 16				yes			
Leconte sparrow	sr	rare								
Sharp tailed sparrow										
Nelson sparrow										
Acadian sharp-tailed sparrow										
Seaside sparrow	tv	unc			Sept. '94					
Lark sparrow										
White-crowned sparrow										
Gambel sparrow										
White-throated sparrow	tv	c	Apr. 27, May 2, 5	May 19, 22	Sept. 25	Oct. 15		tv		
Tree sparrow	tv	ab	Apr. 14, 18, 24	May 22, 24, June 2	Sept. 11, 15	Oct. 16, Dec. 8		tv	c	
Chipping sparrow	wv	c		Apr. 20, May 1	Sept. 20, Oct. 10			wv	c	
Field sparrow	sr	ab	Mar. 27, Apr. 5, 8			Oct 16	yes	sr	c	
Slate-colored junco	sr	c	Mar. 21, 28, Apr. 1			Oct 15	yes	sr		
Carolina junco	tv, wv	ab, fc		May 8, 14, 23	Sept 11, Oct. 4			tv, wv	c	
Song sparrow										
Lincoln sparrow	sr, res	ab, oc	Feb. 21, 28, Mar. 10			Nov 15, Dec. 3	yes	sr	ab	
Swamp sparrow	tv	unc	May 3, 4	May 11, 13						
Fox sparrow	sr	c	Apr. 5, 10			Nov. 12	yes	sr	local	
Towhee	tv	fc	Mar. 21, 29, Apr. 5	Apr. 28, May 3	Sept. 25, Oct. 2	Oct 12, 20, Nov. 4		tv		
Cardinal	sr	fc	Apr. 15, 22, 29			Oct. 10	yes			
	av									

SPECIES RECORDED	NEW YORK							N		
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Ar fr so
Barred owl	res	unc						res	unc	
Great gray owl										
Richardson owl										
Saw-whet owl	wv	unc	Mar. 13					res	rare	
Screech owl	res	fc					yes	res	ab	
Great horned owl	res	rare						res	unc	
Snowy owl	wv	oc						wv	oc	
American hawk owl								wv	rare	
Burrowing owl	av	once								
Carolina paroquet										
Yellow-billed cuckoo	sr	fc	May 10				yes	sr	c	
Black-billed cuckoo	sr	c	May 12				yes	sr	c	
Belted kingfisher	sr	c	Mar. 20				yes	sr	c	
Hairy woodpecker	res	unc					yes	res	fc	
Downy woodpecker	res	c					yes	res	c	
Arctic three-toed woodpecker										
Am. three-toed woodpecker										
Yellow-bellied sapsucker	tv, wv	c, oc	Apr. 6, 13					tv, sr	c	
North. pileated woodpecker								av		
Red-headed woodpecker	sr	local					yes	sr	c	
Red-bellied woodpecker		rare, winter							rare	
Northern flicker	sr, res	c, unc					yes	sr	ab	Apr. 11
Whip-poor-will	sr	local	May 1			Oct. 1	yes	sr	rare	
Nighthawk	sr	fc	May 10			Oct. 1	yes	sr	fc	May
Chimney swift	sr	ab	Apr. 22			Oct.	yes	sr	ab	Apr. 27
Ruby-throated hummingbird	sr	c	May 5			Oct. 1	yes	sr	c	May 10
Kingbird	sr	c	May 5			Oct.	yes	sr	ab	May 4
Gray kingbird										
Arkansas kingbird	av	once			19 Oct. '75					
Crested flycatcher	sr	fc	May 1			Sept.	yes	sr	c	May 5
Phoebe	sr	c	Mar. 20			Nov. 5	yes	sr	ab	Apr. 1
Olive-sided flycatcher	tv	rare	May 12, 18	May 28	Aug. 25	Sept. 18, 30		tv	rare	
Wood pewee	sr	c	May 15			Sept. 25	yes	sr	c	May 13
Yellow-bellied flycatcher	tv	unc	May 15		Aug. 10					
Green-crested flycatcher	sr	fc	May 1, 22				June 10, 25	sr	rare	May 14,
Alder flycatcher	tv	unc	May 5					tv	unc	May 9
Least flycatcher	sr	c	May 1			Sept. 25	yes	sr	c	May 7
Skylark	res	unc					yes			
Horned lark	wv	c						wv	oc	
Hoyt horned lark										
Prairie horned lark	wv, tv	oc						sr	c	Jan. 28,
Blue jay	res	fc					yes	res	c	
Canada jay	av	once								
Northern raven										
American crow	res	c					yes	res	ab	
Fish crow	res	fc					yes			
Starling	res	ab					yes			
Bobolink	sr	fc	May 5			Oct. 5	yes	sr	c	May 5, 1
Cowbird	sr	c	Mar. 20			Nov. 10	yes	sr	c	Apr. 1
Yellow-headed blackbird										
Red-winged blackbird	sr, tv	c, ab	Mar. 1			Dec. 1	yes	sr	ab	Mar.
Meadowlark	sr, res	c, oc					yes	sr	c	Mar. 20
Orchard oriole	sr	c	May 8			Sept.	yes	sr	rare	
Baltimore oriole	sr	c	May 1			Sept.	yes	sr	ab	May 1
Bullock oriole										
Rusty blackbird	tv	c	Mar. 7, 17			Dec.		tv	c, fall	
Purple grackle	sr	c	Mar. 1			Nov.	yes			
Bronzed grackle	tv	fc						sr	ab	Mar. 20
Evening grosbeak								wv	once	
Pine grosbeak	wv	oc			1836–37, 1851–52			wv	oc	
House sparrow	res	ab					yes	res	ab	
Chaffinch	res	unc								
Greenfinch										
Purple finch	tv, sr	ab, rare					yes	sr	c	Apr. 18
American crossbill	wv, res	oc, rare					1 May '79	wv sv	oc, rare	
White-winged crossbill	wv	rare		10 May '75	3 Nov, '74					
Hoary redpoll										
Redpoll	wv	irreg						wv	rare	
Holboell redpoll										
Greater redpoll										
European linnet										
American goldfinch	res	c					yes	sr	c	
Pine siskin	wv	fc, ab, 1882			Oct. 30, Nov. 19					
European goldfinch										
Snowflake	wv	c						wv	ab	
Lapland longspur	wv	rare								
Chestnut-collared longspur										
Vesper sparrow	sr	c	Apr. 1			Nov. 20	yes	sr	c	
Ipswich sparrow										
Savanna sparrow	sr, tv	rare, ab	Apr. 1			Nov. 30	yes	sr	fc	
Baird sparrow										
Grasshopper sparrow	sr	c	Apr. 17, May 1			Oct. 10, 25	yes	sr	local	
Henslow sparrow		rare								
Leconte sparrow										
Sharp-tailed sparrow	sr	c					yes			
Nelson sparrow										
Acadian sharp-tailed sparrow										
Seaside sparrow	sr	c					yes			
Lark sparrow										
White-crowned sparrow	tv	unc	May		Oct.			tv	c	May 7
Gambel sparrow										
White-throated sparrow	tv, wv	ab, unc	Apr. 23	May	Sept. 20			tv	c	Apr. 25
Tree sparrow	wv	ab		Apr.	Nov. 1			wv	c	
Chipping sparrow	sr	ab	Apr. 1			Nov.	yes	sr	ab	Apr. 18
Field sparrow	sr	ab	Apr. 1			Nov. 13	yes	sr	ab	
Slate-colored junco	wv	ab		May	Sept. 20			tv	c	
Carolina junco										
Song sparrow	sr, res	ab, c					yes	sr	ab	
Lincoln sparrow	tv	rare	May 6	May 9	Sept.	Oct. 11, 23		tv	unc	
Swamp sparrow	sr, res	ab, oc					yes	sr	c	
Fox sparrow	tv, wv	c, oc	Feb. 18, Mar. 20	Apr.	Oct.	Nov.		tv	fc	Apr. 11
Towhee	sr	ab	Apr. 14, 20, 24			Oct. 20	yes	sr	unc	
Cardinal	res	fc, local					yes	av		May 10

		ONEIDA						ONONDAGA				
eaves for north	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Breeds	Resident or transient	Common or rare	Returns from north	Departs for south	Breeds
		res.	unc.				yes.	res.	c.			yes.
		av.			Feb. '95	Feb. '75						
		av.				Feb. '93						
	yes.	res.	unc.				Mar. 25, Apr. 30	res.	unc.			
	yes.	res.	c.				yes.	res.	c.			yes.
	yes.	res.	unc.				Apr. 18.	res.	fc.			yes.
		wv.	oc.					wv.	oc.			
		wv.	rare.					wv.	oc.			
	yes.	sr.	c.	May 9, 17.			yes.	sr.	c.			yes, June 10
	yes.	sr.	c.	May 15.			yes.	sr.	c.			yes.
	yes.	sr.	c.	Apr.			yes.	sr.	c.			yes.
	yes.	res.	fc.				yes.	res.	c.			yes.
	yes.	res.	c.				yes.	res.	c.			yes.
		wv, sr.	c.				yes.	wv.	rare.	25 Dec. '83	22 Feb. '89	
		sr.	fc.				yes.					
3	yes.	tv, sr.	fc, unc.				yes.	tv.	ab.			
		sr.	rare.				yes.					
	yes.	sr.	c.				yes.	sr.	fc.			yes.
			rare.									
	yes.	sr.	c.	Apr.			yes.	sr.	c.			yes.
	yes.	sr.	local.				May 19.	tv.	unc.			
	yes.	sr.	fc.				yes.	sr.	fc.			yes.
	yes.	sr.	ab.	Apr. 25.			yes.	sr.	ab.			yes.
	yes.	sr.	c.	May 9.			yes.	sr.	c.			yes.
	yes.	sr.	c.	May 5.			June 10.	sr.	fc.			yes.
	yes.	sr.	fc.	May 13.			June, July 15.	sr.	c.			yes.
	yes.	sr.	ab.	Mar. 25, Apr. 5			yes.	sr.	c.			yes.
		tv, sr.	fc, rare.				local, yes.	tv.	rare.			
	yes.	sr.	c.	May 17.			June, July 20.	sr.	c.			yes.
		sr.	unc.				yes.	sr, tv.	once, unc.			
	14 June '87	sr.						sr.	unc, 29 May '87		Sept.	
		sr.	fc.				yes.	tv, sr.	unc, rare.			yes.
	yes.	sr.	c.	May 1.			yes.	sr.	c.			yes.
		wv.	fc.					wv.				
	yes.	sr.	c.				Mar. 15, May 11	sr.	c.			yes.
	yes.	res.	c.				Apr. 3.	res.	fc.			yes.
		sr.	c.									
		sr.	c.				yes.					
	yes.	res.	ab.				Apr. 20, 29.	res.	ab.			yes.
	yes.	sr.	c.	May 4, 6.			yes.	sr.	c.			yes.
	yes.	sr.	ab.	Mar. 20, Apr. 4.			yes.	sr.	ab.			yes.
	yes.	sr.	ab.	Mar. 18.			yes.	sr.	ab.			yes.
	yes.	sr.	c.	Mar. 30.			yes.	sr.	c.			yes.
	yes.	sr.	rare.	May 5.			yes.					
	yes.	sr.	ab.	May 4.			yes.	sr.	c.			yes.
								av.	once, 17 May '79.			
		tv, sr.	c.				yes.	tv.	ab, fall.			
	yes.	sr.	ab.	Mar. 7, 18.			yes.	sr.	c.			yes.
o.												
'83		wv.	oc.	1875, 1876.				wv.	oc.			
	yes.	res.	ab.				yes.	res.	ab.			yes.
	yes.	sr.	fc.	Apr.			yes.	sr.	c.			yes.
, July 28		wv.	oc.					wv.	irreg.			
		wv.	rare.					wv.	rare.			
		wv.	oc.	1886, 1900.				wv.	irreg, 23 Feb. '86.			
	yes.	sr.	ab.				yes.	sr.	ab.			yes.
		sr, tv.	oc, irreg.				4, 11 Apr. '89.	wv.	ab, 1883.			
		wv.	ab.					wv.	ab.			
								wv.	unc.			
	yes.	sr.	ab.	Apr.			yes.	sr.	ab.			yes.
	yes.	sr.	fc.	Apr.			yes.	sr.	c.			yes.
	May 29.	sr.	local.				yes.	sr.	fc.			yes.
								sr.	rare, 1887.			yes.
		tv.				Oct. 12.						
		av.		13 June '03.								
		tv.	c.	May 4.	May 16.		(?)	tv.	c.			
		tv, sr.	c, local.	Apr. 30.	May 15.		yes.	tv.	ab.			
		wv.	c.		Apr. 27.			wv.	ab.			
	yes.	sr.	ab.	Apr. 21.			yes.	sr.	ab.			yes.
	yes.	sr.	c.				yes.	sr.	c.			yes.
		tv, sr.	c, unc.	Apr. 12.	May 15.		yes.	tv, res.	ab, oc.			May 4.
	yes.	sr.	ab.	Mar.			yes.	sr.	ab.			yes.
		tv.	rare.					tv.	rare.			
	yes.	sr.	fc.	Apr. 14.			yes.	sr.	fc.			yes.
		tv.	c.					tv.	fc.			
	yes.	sr.	fc, local.	May 12.			yes.	sr.	fc.			
								av.	twice.			

SPECIES RECORDED	NEW YORK							NIAGARA					ONEIDA						ONONDAGA				
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Breeds	Resident or transient	Common or rare	Returns from north	Departs for south	Breeds
Barred owl	res	unc						res	unc				res	unc				yes	res	c			yes
Great gray owl													av			Feb. '95	Feb. '75						
Richardson owl													av				Feb. '93						
Saw-whet owl	wv	unc	Mar. 13					res	rare			yes	res	unc				Mar. 25, Apr. 30	res	unc			
Screech owl	res	fc					yes	res	ab			yes	res	c				yes	res	c			yes
Great horned owl	res	rare						res	unc			yes	res	unc				Apr. 18	res	fc			yes
Snowy owl	wv	oc						wv	oc				wv	oc					wv	oc			
American hawk owl								wv	rare				wv	rare					wv	oc			
Burrowing owl	av	once																					
Carolina paroquet																							
Yellow-billed cuckoo	sr	fc	May 10				yes	sr	c			yes	sr	c	May 9, 17			yes	sr	c			yes, June 10
Black-billed cuckoo	sr	c	May 12				yes	sr	c			yes	sr	c	May 25			yes	sr	c			yes
Belted kingfisher	sr	c	Mar. 20				yes	sr	c			yes	sr	c	Apr.			yes	sr	c			yes
Hairy woodpecker	res	unc					yes	res	fc			yes	res	fc				yes	res	c			yes
Downy woodpecker	res	c					yes	res	c			yes	res	c				yes	res	c			yes
Arctic three-toed woodpecker													wv, sr	c				yes	wv	rare	25 Dec. '83	22 Feb. '89	
Am. three-toed woodpecker													sr	fc				yes					
Yellow-bellied sapsucker	tv, wv	c, o	Apr. 6, 13					tv, sr	c		May 13	yes	tv, sr	fc, unc				yes	tv	ab			
North. pileated woodpecker								av					sr	rare				yes					
Red-headed woodpecker	sr	local				yes		sr	c			yes	sr	c				yes	sr	fc			yes
Red-bellied woodpecker		rare, winter							rare					rare									
Northern flicker	sr, res	c, unc				yes		sr	ab	Apr. 11		yes	sr	c	Apr.			yes	sr	c			yes
Whip-poor-will	sr	local	May 1			Oct. 1	yes	sr	rare			yes	sr	local				May 19	tv	unc			
Nighthawk	sr	fc	May 10			Oct. 1	yes	sr	fc	May		yes	sr	fc				yes	sr	fc			yes
Chimney swift	sr	ab	Apr. 22			Oct.	yes	sr	ab	Apr. 27		yes	sr	ab	Apr. 25			yes	sr	ab			yes
Ruby-throated hummingbird	sr	c	May 5			Oct. 1	yes	sr	c	May 10		yes	sr	c	May 9			yes	sr	c			yes
Kingbird	sr	c	May 5			Oct	yes	sr	ab	May 4		yes	sr	c	May 5			June 10	sr	fc			yes
Gray kingbird																							
Arkansas kingbird	av	once			19 Oct. '75																		
Crested flycatcher	sr	fc	May 1			Sept.	yes	sr	c	May 5		yes	sr	fc	May 13			June, July 15	sr	c			yes
Phoebe	sr	c	Mar. 20			Nov. 5	yes	sr	ab	Apr. 1		yes	sr	ab	Mar. 25, Apr. 5			yes	sr	c			yes
Olive-sided flycatcher	tv	rare	May 12, 18	May 28	Aug. 25	Sept. 18, 30		tv	rare				tv, sr	fc, rare				local, yes	tv	rare			
Wood pewee	sr	c	May 15			Sept. 25	yes	sr	c	May 13		yes	sr	c	May 17			June, July 20	sr	c			yes
Yellow-bellied flycatcher	tv	unc	May 15		Aug. 10								sr	unc				yes	sr, tv	once, unc			
Green-crested flycatcher	sr	fc	May 1, 22				June 10, 25	sr	rare	May 14, 23		14 June '87	sr						sr	unc, 29 May '87		Sept	
Alder flycatcher	tv	unc	May 5					tv	unc	May 9			sr	fc				yes	tv, sr	unc, rare			yes
Least flycatcher	sr	c	May 1			Sept. 25	yes	sr	c	May 7		yes	sr	c	May 1			yes	sr	c			yes
Skylark	res	unc					yes																
Horned lark	wv	c						wv	oc				wv	fc					wv				
Hoyt horned lark																							
Prairie horned lark	wv, tv	oc						sr															
Blue jay	res	fc					yes	sr	c	Jan. 28, Feb. 10		yes	sr	c				Mar. 15, May 11	sr	c			yes
Canada jay	av	once						res	c			yes	res	c				Apr. 3	res	fc			yes
Northern raven													sr	c									
American crow	res	c					yes						sr	c				yes					
Fish crow	res	fc					yes	res	ab			yes	res	ab				Apr. 20, 29	res	ab			yes
Starling	res	ab					yes																
Bobolink	sr	fc	May 5			Oct. 5	yes	sr	c	May 5, 10		yes	sr	c	May 4, 6			yes	sr	c			yes
Cowbird	sr	c	Mar. 20			Nov. 10	yes	sr	c	Apr. 1		yes	sr	ab	Mar. 20, Apr. 4			yes	sr	ab			yes
Yellow-headed blackbird																							
Red-winged blackbird	sr, tv	c, ab	Mar. 1			Dec. 1	yes	sr	ab	Mar.		yes	sr	ab	Mar. 18			yes	sr	ab			yes
Meadowlark	sr, res	c, oc					yes	sr	c	Mar. 20		yes	sr	c	Mar. 30			yes	sr	c			yes
Orchard oriole	sr	c	Mar 8			Sept.	yes	sr	rare			yes	sr	rare	May 5			yes					
Baltimore oriole	sr	c	May 1			Sept.	yes	sr	ab	May 1		yes	sr	ab	May 4			yes	sr	c			yes
Bullock oriole																			av	once, 17 May '79			
Rusty blackbird	tv	c	Mar. 7, 17			Dec.		tv	c, fall				tv, sr	c				yes	tv	ab, fall			
Purple grackle	sr	c	Mar. 1			Nov.	yes																
Bronzed grackle	tv	fc						sr	ab	Mar. 20		yes	sr	ab	Mar. 7, 18			yes	sr	c			yes
Evening grosbeak								wv	once		Feb. '90												
Pine grosbeak	wv	oc						wv	oc		29 Feb. '83		wv	oc	1875, 1876				wv	oc			
House sparrow	res	ab			1836–37, 1851–52							yes	res	ab				yes	res	ab			yes
Chaffinch	res	unc					yes	res	ab														
Greenfinch																							
Purple finch	tv, sr	ab, rare										yes	sr	fc	Apr.			yes	sr	c			yes
American crossbill	wv, res	oc, rare					yes	sr	c	Apr. 18			wv	oc					wv	irreg			
White-winged crossbill	wv	rare		10 May '75	3 Nov. '74		1 May '79	wv sv	oc, rare		June 8, July 28		wv	rare					wv	rare			
Hoary redpoll																							
Redpoll	wv	irreg																	wv	irreg, 23 Feb. '86			
Holboell redpoll								wv	rare		1889		wv	oc	1886, 1900								
Greater redpoll																							
European linnet																							
American goldfinch	res	c																					
Pine siskin	wv	fc, ab, 1882			Oct. 30, Nov. 10		yes	sr	c			yes	sr	ab				yes	sr	ab			yes
European goldfinch													sr, tv	oc, irreg				4, 11 Apr. '89	wv	ab, 1883			
Snowflake	wv	c																					
Lapland longspur	wv	rare											wv	ab					wv	ab			
Chestnut-collared longspur								wv	ab										wv	unc			
Vesper sparrow	sr	c	Apr. 1																				
Ipswich sparrow						Nov. 20	yes	sr	c			yes	sr	ab	Apr.			yes	sr	ab			yes
Savanna sparrow	sr, tv	rare, ab	Apr. 1																				
Baird sparrow						Nov. 30	yes	sr	fc			yes	sr	fc	Apr.			yes	sr	c			yes
Grasshopper sparrow	sr	c	Apr. 17, May 1																				
Henslow sparrow		rare				Oct. 20, 25	yes	sr	local			May 29	sr	local				yes	sr	fc			yes
Leconte sparrow																			sr	rare, 1887			
Sharp-tailed sparrow	sr	c																					
Nelson sparrow																							
Acadian sharp-tailed sparrow							yes										Oct. 12						
Seaside sparrow	sr	c											tv										
Lark sparrow																							
White-crowned sparrow	tv	unc	May				yes																
Gambel sparrow					Oct.								av		13 June '03								
White-throated sparrow	tv, wv	ab, unc	Apr. 23					tv	c	May 7			tv	c	May 4	May 16		(?)	tv	c			
Tree sparrow	wv	ab		May	Sept. 20																		
Chipping sparrow	r	ab	Apr. 1	Apr.	Nov. 1			tv	c	Apr. 25			tv, sr	c, local	Apr. 30	May 15		yes	tv	ab			
Field sparrow	sr	ab	Apr. 1					wv	c				wv	c		Apr. 27			wv	ab			
Slate-colored junco	wv	ab				Nov.	yes	sr	ab	Apr. 18		yes	sr	ab	Apr. 21			yes	sr	ab			yes
Carolina junco				May	Sept. 20	Nov. 13	yes	sr	ab			yes	sr	c				yes	sr	c			yes
Song sparrow	sr, res	ab, c						tv	c				tv, sr	c, unc	Apr. 12	May 15		yes	tv, res	ab, oc			May 4
Lincoln sparrow	tv	rare	May 6																				
Swamp sparrow	sr, res	ab, oc		May 9	Sept.	Oct. 11, 23	yes	sr	ab			yes	sr	ab	Mar.			yes	sr	ab			yes
Fox sparrow	tv, wv	c, oc	Feb. 18, Mar. 20	Apr.				tv	unc				tv	rare					tv	rare			
Towhee	sr	ab	Apr. 14, 20, 24		Oct.	Nov.	yes	sr	c			yes	sr	fc	Apr. 14			yes	sr	fc			yes
Cardinal	res	fc, local				Oct. 20	yes	tv	fc	Apr. 11			tv	c					tv	fc			
							yes	sr	unc			yes	sr	fc, local	May 12				sr	fc			
								av		May 10									av	twice			

SPECIES RECORDED	ONTARIO						
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds
Barred owl	res	unc					
Great gray owl							
Richardson owl							
Saw-whet owl	wv	rare					
Screech owl	res	c					Apr. 1, 20
Great horned owl	res	unc					Feb. 20, Mar. 1
Snowy owl	wv	oc		Mar. 11	Oct. 25, Nov. 15		
American hawk owl	wv	rare			Nov. '75		
Burrowing owl							
Carolina paroquet							
Yellow-billed cuckoo	sr	fc	May 11, 18			Oct. 10	June 1, 25
Black-billed cuckoo	sr	fc	May 18				yes
Belted kingfisher	sr, res	c, rare	Mar. 31, Apr. 1, 10			Nov. 1, 20	Apr. 20, May 1
Hairy woodpecker	res	fc					yes
Downy woodpecker	res	c					Apr. 25, May 1
Arctic three-toed woodpecker	wv	rare			18 Nov. '98		
Am. three-toed woodpecker							
Yellow-bellied sapsucker	tv	c	Apr. 2, 12, 14	May 4, 15	Sept. 15, 22	Oct. 10, 25	
North. pileated woodpecker							
Red-headed woodpecker	sr, res	fc, oc	Apr. 30, May 10			Oct. 1, 20	May 20, June 1
Red-bellied woodpecker	res	rare					yes
Northern flicker	sr, res	ab, rare	Mar. 30, Apr. 1, 12			Nov. 1, 29	May 10, June 1
Whip-poor-will	tv, sr	fc, local	May 1, 13			Sept. 20	yes
Nighthawk	tv, sr	fc, oc	May 10, 29			Sept. 30, Oct. 3	
Chimney swift	sr	ab	Apr. 20, 24, 30			Oct. 1, 8	May 15, June 2
Ruby-throated hummingbird	sr	c	May 8, 13, 15			Sept. 15, 26	June 5, July
Kingbird	sr	c	Apr. 28, May 5, 10			Sept. 16	May 20, June 1
Gray kingbird							
Arkansas kingbird							
Crested flycatcher	sr	fc	May 1, 6, 10			Aug. 20, Sept. 9	June 1, 18
Phoebe	sr	ab	Mar. 20, Apr. 1, 5			Oct. 14, 23	Apr. 25, May 1
Olive-sided flycatcher	tv	rare	May 17	May 19			
Wood pewee	sr	ab	May 13, 16, 18			Sept. 10, 25	June 10, 25
Yellow-bellied flycatcher	tv	unc	May 17	June 1	Sept		
Green-crested flycatcher	sr	rare					once
Alder flycatcher	tv, sr	fc, rare	May 3, 6	May 20, 25			22 June '90
Least flycatcher	sr	c	May 2, 4, 6			Aug. 20, Sept. 2	May 25, June 2
Skylark							
Horned lark	wv	oc					
Hoyt horned lark							
Prairie horned lark	sr	c	Jan. 20, Feb. 2, 20			Nov. 4, 12	Mar. 20, Apr. 1
Blue jay	res	fc					Apr. 25, May 1
Canada jay							
Northern raven	av	once, c, 1810			1885		
American crow	res	ab					Apr. 1, May 15
Fish crow							
Starling							
Bobolink	sr	c	Apr. 29, May 3, 10			Sept. 14, 16	May 20, June 1
Cowbird	sr, res	ab, rare	Mar. 20, 26, Apr. 3			Oct. 18, Nov. 11	yes
Yellow-headed blackbird							
Red-winged blackbird	sr, res	ab, rare	Feb. 24, Mar. 10, 18			Oct. 20, Nov. 17	May 5, June 12
Meadowlark	sr, res	c, oc	Mar. 8, 15, 22			Nov. 12	May 10, 30
Orchard oriole	sr	rare					1883
Baltimore oriole	sr	ab	Apr. 27, May 1, 5			Sept. 1, 10	May 15, June 1
Bullock oriole							
Rusty blackbird	tv	c	Apr. 1, 5	Apr. 20, May 11	Sept. 5, 12	Nov. 9, 15	
Purple grackle							
Bronzed grackle	sr, res	ab, rare	Feb. 26, Mar. 8, 18			Oct. 19, 31	Apr. 20, June 1
Evening grosbeak	wv	once			Jan. '90		
Pine grosbeak	wv	oc		Mar. 30	Dec. 1, 21		
House sparrow	res	ab					yes
Chaffinch							
Greenfinch							
Purple finch	sr	fc	Mar. 25, Apr. 1, 7			Oct. 25, Nov. 5	May 15, 30
American crossbill	wv, sv	irreg, rare		Apr. 18	27 July '03		
White-winged crossbill	wv	rare					
Hoary redpoll							
Redpoll	wv	rare					
Holboell redpoll							
Greater redpoll							
European linnet							
American goldfinch	sr, res	ab, fc	Apr. 20, 29			Nov. 5, 29	July 5, 25
Pine siskin	wv	rare			1883		
European goldfinch							
Snowflake	wv	fc		Mar. 15, 24	Oct. 25, 30		
Lapland longspur	wv	rare			27 Jan. '98		
Chestnut-collared longspur							
Vesper sparrow	sr	ab	Mar. 26, Apr. 4, 5			Oct. 17, Nov. 11	May 5, June 12
Ipswich sparrow							
Savanna sparrow	tv, sr	ab, fc	Mar. 26, Apr. 4, 10			Oct. 7, 25, Nov. 10	May 10, 30
Baird sparrow							
Grasshopper sparrow	sr	local	May 11, 15				yes
Henslow sparrow							
Leconte sparrow							
Sharp-tailed sparrow							
Nelson sparrow	tv	unc			Oct. 7		
Acadian sharp-tailed sparrow							
Seaside sparrow							
Lark sparrow							
White-crowned sparrow	tv	fc	Apr. 28, May 2, 5	May 22, 25	Sept. 29	Oct. 13, 20	
Gambel sparrow							
White-throated sparrow	tv	c	Apr. 11, 14, 25	May 18, 24	Sept. 16, 22	Oct. 16, Nov. 22	
Tree sparrow	wv	ab		Apr. 16, May 11	Sept. 17, Oct. 26		
Chipping sparrow	sr	ab	Mar. 31, Apr. 5, 15			Oct. 15, Nov. 1	May 15, June 1
Field sparrow	sr	fc	Apr. 1, 4, 10			Oct. 14	May 15, 25
Slate-colored junco	tv, res	ab, unc	Mar. 18, Apr. 7	Apr. 25, May 13	Sept. 20, 25	Oct. 30, Nov. 20	local
Carolina junco							
Song sparrow	sr, res	ab, fc	Mar. 10, 20			Nov. 1, 15	May 1, 25
Lincoln sparrow	tv	unc	Apr. 28	May 13			
Swamp sparrow	sr	fc	Apr. 9, 20			Nov. 4	May 15, 30
Fox sparrow	tv	unc	Mar. 21, Apr. 4, 10	Apr. 25, 29	Oct. 5	Oct. 24	
Towhee	sr	fc, local	Apr. 15, 25			Oct. 15	May 20, June 1
Cardinal							

ent ent	ORANGE					ORLEANS						
	Common or rare	Arrives from south	Leaves for north	Returns from north	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds
	fc				yes	res	unc					
						res	unc					1880
	c				yes	res	c					yes
	oc					res	fc					yes
	rare					wv	oc					
						wv	rare					
					yes	sr		May 10			Sept. 15	June 2
	c	May 12			yes	sr	c	May 9, 12			Sept.	June 6
	c	Apr. 1			yes	sr	c	Apr. 12				May 12
	c				yes	res	c					yes
	c				yes	res	ab					May 10
						wv	rare				Oct. 15	
						tv	c		May	Sept.	Oct.	
						av						
	c	May 2			yes	sr	fc					yes
	Sept. '90, rare						rare					
	c, rare	Mar. 13, Apr. 5			yes	sr	ab	Apr.				May 23
	fc	Apr. 29, May 5			yes	sr	fc	May			Sept.	yes
	c	May 7, 11			yes	sr	fc					yes
	ab	Apr. 21, 23			yes	sr	ab	Apr. 25				June 12
	c	May 8			yes	sr	c	May 9				yes
	c	Apr. 30, May 5			yes	sr	c	May 4				June 8
	c	Apr. 30, May 5			yes	sr	fc	Apr. 30, May 7				June 8
	c	Mar. 22, Apr.			yes	sr	ab	Mar. 25, Apr. 3			Oct.	2 broods
	fc	May 9, 17										
	fc	May 9			yes	sr	c	May 14				yes
	fc	May 9, 14				tv	rare	May 26				
						sr	rare					June 19
	fc, oc	May 12, 15, 25				sr	unc	May 3, 7				June 19
	c	May 3, 6			yes	sr	c	May 1				June 12
	oc					wv	oc					
						sr	c	Feb. 10			Nov.	Mar. 9, 20
	c				yes	res	fc					yes
	c				yes	res	ab					yes
	local											
	local				yes							
	c	Apr. 30, May 8			yes	sr	c	May 1				yes
	c	Mar. 9, 25			yes	sr	c	Mar. 18				yes
												yes
	c	Mar. 5, 16			yes	sr	c	Mar. 12				yes
	c	Mar. 13			yes	sr	c	Mar. 22				yes
	c	May 3, 5			yes	sr	rare					yes
	c	May 3			yes	sr	ab	May 3, 4				
	c	Mar. 22, Apr. 9				tv	c					
	c	Mar. 9			yes							
	fc					sr	c	Mar. 15, 29				yes
						wv	once, 1889–90					
	rare					wv	oc					
	ab				yes	res	ab					yes
	c	Apr.			yes	sr	c	Apr. 14				yes
	c		May 6	Nov.		wv	oc					
						wv	rare, Feb. '88					
	oc					wv	oc					
	c				yes	sr	ab					yes
s	irreg, rare				3, 12 May '87	tv	irreg		4 July '81			
	c					wv	c					
	c	Mar. 20, 30			yes	sr	ab	Mar. 20, Apr. 3				yes
	fc	Apr. 2			yes	sr	fc					yes
					yes	sr	unc	May				yes
		Apr. 23, May 5	May 15			tv	fc	May 3	May 10, 16			
	c	Apr. 1, 15	May 10			tv	c	Apr. 23, 28	May 10			
	c		Mar.	Dec. 9		wv	c					
	c	Mar. 20, Apr. 5			yes	sr	ab	Apr. 5, 9				yes
	c	Apr. 2			yes	sr	c	Apr.				yes
	c, ab		May			tv, wv	ab, fc					
	ab, fc	Mar. 5			yes	sr	ab	Mar. 17				yes
						tv	rare					
						sr	c					yes
						tv	unc					
	c	Apr. 29			yes	sr	local					yes
	rare					av						

SPECIES RECORDED	ONTARIO							ORANGE						ORLEANS						
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds
Barred owl	res	unc						res	fc				yes	res	unc					
Great gray owl																				
Richardson owl																				
Saw-whet owl	wv	rare					Apr. 1, 20	res	c					res	unc					
Screech owl	res	c					Feb. 20, Mar. 12	res	oc				yes	res	c					1880
Great horned owl	res	unc		Mar. 11	Oct. 25, Nov. 15			wv	rare					res	fc					yes
Snowy owl	wv	oc			Nov. '75									wv	oc					yes
American hawk owl	wv	rare												wv	rare					
Burrowing owl																				
Carolina paroquet																				
Yellow-billed cuckoo	sr	fc	May 11, 18			Oct. 10	June 1, 25	sr					yes	sr		May 10			Sept. 15	June 3
Black-billed cuckoo	sr	fc	May 18				yes	sr	c	May 12			yes	sr	c	May 9, 12			Sept.	June 6
Belted kingfisher	sr, res	c, rare	Mar. 31, Apr. 1, 10			Nov. 1, 20	Apr. 20, May 18	sr	c	Apr. 1			yes	sr	c	Apr. 12				May 12
Hairy woodpecker	res	fc					yes	res	c				yes	res	c					yes
Downy woodpecker	res	c					Apr. 25, May 15	res	c				yes	res	ab					May 10
Arctic three-toed woodpecker	wv	rare			18 Nov. '98									wv	rare				Oct. 15	
Am. three-toed woodpecker																				
Yellow-bellied sapsucker	tv	c	Apr. 2, 12, 14	May 4, 15	Sept. 15, 22	Oct. 10, 25		tv						tv	c		May	Sept.	Oct.	
North. pileated woodpecker														av						
Red-headed woodpecker	sr, res	fc, oc	Apr. 30, May 10			Oct. 1, 20	May 20, June 10	sr	c	May 2			yes	sr	fc					
Red-bellied woodpecker	res	rare					yes		Sept. '90, rare						rare					yes
Northern flicker	sr, res	ab, rare	Mar. 30, Apr. 1, 12			Nov. 1, 29	May 10, June 12	sr, wv	c, rare	Mar. 13, Apr. 5			yes	sr	ab	Apr.				
Whip-poor-will	tv, sr	fc, local	May 1, 13			Sept. 20	yes	sr	fc	Apr. 29, May 5			yes	sr	fc	May				May 23
Nighthawk	tv, sr	fc, oc	May 10, 29			Sept. 30, Oct. 3		sr	c	May 7, 11			yes	sr	fc				Sept.	yes
Chimney swift	sr	ab	Apr. 20, 24, 10			Oct. 1, 8	May 15, June 20	sr	ab	Apr. 21, 23			yes	sr	ab	Apr. 25				yes
Ruby-throated hummingbird	sr	c	May 8, 13, 15			Sept. 15, 26	June 5, July	sr	c	May 8			yes	sr	c	May 9				June 12
Kingbird	sr	c	Apr. 28, May 5, 10			Sept. 16	May 20, June 15	sr	c	Apr. 30, May 5			yes	sr	c	May 4				yes
Gray kingbird																				June 8
Arkansas kingbird																				
Crested flycatcher	sr	fc	May 1, 6, 10			Aug. 20, Sept. 9	June 1, 18	sr	c	Apr. 30, May 5			yes	sr	fc	Apr. 30, May 7				June 8
Phoebe	sr	ab	Mar. 20, Apr. 1, 5			Oct. 14, 23	Apr. 25, May 15	sr	c	Mar. 22, Apr.			yes	sr	ab	Mar. 25, Apr. 3			Oct.	2 broods
Olive-sided flycatcher	sr	rare	May 17	May 19				tv	fc	May 9, 17										
Wood pewee	sr	ab	May 13, 16, 18			Sept. 10, 25	June 10, 25	sr	fc	May 9			yes	sr	c	May 14				yes
Yellow-bellied flycatcher	tv	unc	May 17	June 1	Sept			tv	fc	May 9, 14				tv	rare	May 26				
Green-crested flycatcher	sr	rare					once							sr	rare					June 19
Alder flycatcher	tv, sr	fc, rare	May 3, 6	May 20, 25			22 June '90	tv, sr	fc, oc	May 12, 15, 25				sr	unc	May 3, 7				June 19
Least flycatcher	sr	c	May 2, 4, 6			Aug. 20, Sept. 2	May 25, June 20	sr	c	May 3, 6			yes	sr	c	May 1				June 12
Skylark																				
Horned lark	wv	oc						wv	oc					wv	oc					
Hoyt horned lark																				
Prairie horned lark	sr	c	Jan. 20, Feb. 2, 20			Nov. 4, 12	Mar. 20, Apr. 12							sr	c	Feb. 10			Nov.	Mar. 9, 20
Blue jay	res	fc					Apr. 25, May 18	res	c				yes	res	fc					yes
Canada jay																				
Northern raven	av	once, c, 1810			1885															
American crow	res	ab					Apr. 1, May 15	res	c				yes	res	ab					yes
Fish crow								sr	local											
Starling								res	local				yes							
Bobolink	sr	c	Apr. 29, May 3, 10			Sept. 14, 16	May 20, June 12	sr	c	Apr. 30, May 8			yes	sr	c	May 1				yes
Cowbird	sr, res	ab, rare	Mar. 20, 26, Apr. 3			Oct. 18, Nov. 11	yes	sr	c	Mar. 9, 25			yes	sr	c	Mar. 18				yes
Yellow-headed blackbird																				yes
Red-winged blackbird	sr, res	ab, rare	Feb. 24, Mar. 10, 18			Oct. 20, Nov. 17	May 5, June 12	sr	c	Mar. 5, 16			yes	sr	c	Mar. 12				yes
Meadowlark	sr, res	c, oc	Mar. 8, 15, 22			Nov. 12	May 10, 30	sr	c	Mar. 13			yes	sr	c	Mar. 22				yes
Orchard oriole	sr	rare					1883	sr	c	May 3, 5			yes	sr	rare					yes
Baltimore oriole	sr	ab	Apr. 27, May 1, 5			Sept. 1, 10	May 15, June 10	sr	c	May 3			yes	sr	ab	May 3, 4				
Bullock oriole																				
Rusty blackbird	tv	c	Apr. 1, 5	Apr. 20, May 11	Sept. 5, 12	Nov. 9, 15		tv	c	Mar. 22, Apr. 9				tv	c					
Purple grackle								sr	c	Mar. 9			yes							
Bronzed grackle	sr, res	ab, rare	Feb. 26, Mar. 8, 18			Oct. 19, 31	Apr. 20, June 1	tv, sr	fc					sr	c	Mar. 15, 29				yes
Evening grosbeak	wv	once			Jan. '90									wv	once, 1889–90					
Pine grosbeak	wv	oc		Mar. 30	Dec. 1, 21			wv	rare					wv	oc					
House sparrow	res	ab					yes	res	ab				yes	res	ab					yes
Chaffinch																				
Greenfinch																				
Purple finch	sr	fc	Mar. 25, Apr. 1, 7			Oct. 25, Nov. 5	May 15, 30	sr	c	Apr.			yes	sr	c	Apr. 14				yes
American crossbill	wv, sr	irreg, rare		Apr. 18	27 July '03			wv	c		May 6	Nov.		wv	oc					
White-winged crossbill	wv	rare												wv	rare, Feb. '88					
Hoary redpoll																				
Redpoll	wv	rare						wv	oc					wv	oc					
Holboell redpoll																				
Greater redpoll																				
European linnet																				
American goldfinch	sr, res	ab, fc	Apr. 20, 29					res	c				yes	sr	ab					yes
Pine siskin	wv	rare			1883	Nov. 5, 29	July 5, 25	wv, res	irreg, rare				3, 12 May '87	tv	irreg		4 July '81			
European goldfinch																				
Snowflake	wv	fc		Mar. 15, 24	Oct. 25, 30			wv	c					wv	c					
Lapland longspur	wv	rare			27 Jan. '98															
Chestnut-collared longspur																				
Vesper sparrow	sr	ab	Mar. 26, Apr. 4, 5			Oct. 17, Nov. 11	May 5, June 12	sr	c	Mar. 20, 30			yes	sr	ab	Mar. 20, Apr. 3				yes
Ipswich sparrow																				
Savanna sparrow	tv, sr	ab, fc	Mar. 26, Apr. 4, 10			Oct. 7, 25, Nov. 10	May 10, 30	sr	fc	Apr. 2			yes	sr	fc					yes
Grasshopper sparrow	sr	local	May 11, 15					sr					yes	sr	unc	May				yes
Henslow sparrow							yes													
Leconte sparrow																				
Sharp-tailed sparrow																				
Nelson sparrow	tv	unc																		
Acadian sharp-tailed sparrow					Oct. 7															
Seaside sparrow																				
Lark sparrow																				
White-crowned sparrow	tv	fc	Apr. 28, May 2, 5	May 22, 25	Sept 29	Oct. 11, 20		tv		Apr. 23, May 5	May 15			tv	fc	May 3	May 10, 16			
Gambel sparrow																				
White-throated sparrow	tv	c	Apr. 11, 14, 25	May 18, 24	Sept. 16, 2	Oct. 16, Nov. 22		tv	c	Apr. 1, 15	May 10			tv	c	Apr. 23, 28	May 10			
Tree sparrow	wv	ab		Apr. 16, May 11	Sept. 17, Oct 26			wv	c		Mar	Dec. 9		wv	c					
Chipping sparrow	sr	ab	Mar. 31, Apr. 5, 15			Oct. 15, Nov. 1	May 15, June 10	sr	c	Mar. 20, Apr. 5			yes	sr	ab	Apr. 5, 9				yes
Field sparrow	sr	fc	Apr. 1, 4, 10			Oct. 14	May 15, 25	sr	c	Apr. 2			yes	sr	c	Apr				yes
Slate-colored junco	tv, res	ab, unc	Mar. 18, Apr. 7	Apr. 25, May 13	Sept. 20, 25	Oct. 30, Nov. 20	local	wv, tv	c, ab		May			tv, wv	ab, fc					
Carolina junco																				
Song sparrow	sr, res	ab, fc	Mar. 10, 20			Nov. 1, 15	May 1, 25	sr, res	ab, fc	Mar. 5			yes	sr	ab	Mar. 17				yes
Lincoln sparrow	tv	unc	Apr. 28	May 13										tv	rare					
Swamp sparrow	sr	fc	Apr. 9, 20			Nov. 4	May 15, 30							sr	c					yes
Fox sparrow	tv	unc	Mar. 21, Apr. 4, 10			Oct. 24		tv						tv	unc					
Towhee	sr	fc, local	Apr. 15, 25	Apr. 25, 29	Oct. 5	Oct. 15	May 20, June 10	sr	c	Apr. 29			yes	sr	local					yes
Cardinal									rare					av						

SPECIES RECORDED	OSWEGO				OTSEGO			PUTNAM				
	Resident or transient	Common or rare	Arrives from south	Breeds	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	[illegible]
Barred owl	res	c		yes	res			res	unc			ye
Great gray owl		rare										
Richardson owl												
Saw-whet owl	res	unc		yes				tv	oc			
Screech owl	res	c		yes	res	c		res	c			ye
Great horned owl	res	c		yes	res			res	fc			ye
Snowy owl	wv	fc			wv	c, 1889		wv	rare, 2 Dec. '99			
American hawk owl	wv	rare										
Burrowing owl												
Carolina paroquet												
Yellow-billed cuckoo	sr	c	May 13	June 2	sr			sr	c	May 3, 12		ye
Black-billed cuckoo	sr	c	May 17	yes	sr			sr	c	May 8, 13		ye
Belted kingfisher	sr	c	Apr	May	sr			sr	c			ye
Hairy woodpecker	res	fc		yes	res			res	c			ye
Downy woodpecker	res	c		yes, May 2	res			res	ab			ye
Arctic three-toed woodpecker												
Am. three-toed woodpecker												
Yellow-bellied sapsucker	tv, sr	ab, fc	Apr. 20, May 12	yes	tv			tv	c			
North. pileated woodpecker		rare										
Red-headed woodpecker	sr	unc		yes	sr			tv	rare			
Red-bellied woodpecker		rare										
Northern flicker	sr, res	ab, rare	Apr. 9, 20	May 23	sr			sr	c	Mar. 20, Apr. 2		ye
Whip-poor-will	sr	c		yes	sr			sr		Apr. 30		ye
Nighthawk	sr		May 15, 17, 22	yes	sr			sr	c	May 6		ye
Chimney swift	sr	ab	Apr. 24, 27	yes, June 13	sr			sr	ab	Apr. 1, 24		ye
Ruby-throated humming-bird	sr	c	May 18	June 20	sr			sr	ab	May 7		ye
Kingbird	sr	c	May 3, 8	June 8	sr			sr	c	Apr. 29, May 3		ye
Gray kingbird												
Arkansas kingbird												
Crested flycatcher	sr	c	May 4	yes, June 8	sr			sr	c	May 7		ye
Phoebe	sr	c	Mar. 29	yes	sr			sr	c	Mar. 19, 30		ye
Olive-sided flycatcher		rare										
Wood pewee	sr	c		June 15	sr			sr	c	May 13		ye
Yellow-bellied flycatcher		rare										
Green-crested flycatcher												
Alder flycatcher	sr	unc			sr							
Least flycatcher	sr	c	May 6, 8	yes	sr			sr	c	Apr. 28, 30		ye
Skylark												
Horned lark	wv	fc						wv	c			
Hoyt horned lark												
Prairie horned lark	sr	fc		yes				sr				
Blue jay	res, tv	unc, c		Apr. 30, May 12	res			res	ab			ye
Canada jay	av											
Northern raven	av											
American crow	res	ab		yes	res			res	c			ye
Fish crow												
Starling												
Bobolink	sr	ab		yes	sr			sr	ab	Apr. 30		ye
Cowbird	sr	ab	Mar. 28	May 5, June 2	sr			sr	ab	Mar. 23, Apr. 4		ye
Yellow-headed blackbird												
Red-winged blackbird	sr	ab	Mar	May 11, June 17	sr			sr	ab	Mar. 16		ye
Meadowlark	sr	ab	Mar. 18, 27	May 24	sr			sr	ab			ye
Orchard oriole	sr	unc			sr			sr	c	May 2, 4		ye
Baltimore oriole	sr	ab	May 4	May 30, June 12	sr	c		sr	ab	May 3		ye
Bullock oriole												
Rusty blackbird	tv	c			tv			tv	c			
Purple grackle								sr	ab	Mar. 13, 23		ye
Bronzed grackle	sr	ab	Mar. 28	yes, May 4	sr	c		tv	c	Mar. 17		
Evening grosbeak												
Pine grosbeak	wv	oc						wv	oc	Jan. '96		
House sparrow	res	ab		yes	res	ab	yes	res	ab			ye
Chaffinch												
Greenfinch												
Purple finch	sr	c	Apr. 5	yes	sr			sr	c	Apr		ye
American crossbill	wv	oc			wv	oc		wv	oc			
White-winged crossbill								wv	rare			
Hoary redpoll												
Redpoll	wv	fc						wv	c	irreg		
Holboell redpoll												
Greater redpoll												
European linnet												
American goldfinch	res	c		yes, June 12	sr	c		sr, res	ab, oc	Apr. 24		ye
Pine siskin	wv	oc						wv	oc			
European goldfinch												
Snowflake	wv	c			wv			wv	ab			
Lapland longspur	wv	rare										
Chestnut-collared longspur												
Vesper sparrow	sr	ab	Apr. 1	yes	sr	c		sr	ab			ye
Ipswich sparrow												
Savanna sparrow	sr	fc	Apr	yes	sr	fc						
Baird sparrow												
Grasshopper sparrow								sr	c			ye
Henslow sparrow												
Leconte sparrow												
Sharp-tailed sparrow												
Nelson sparrow												
Acadian sharp-tailed sparrow												
Seaside sparrow												
Lark sparrow												
White-crowned sparrow	tv	c	May 12		tv			tv	c	May 2	May 15	
Gambel sparrow												
White-throated sparrow	tv, sr	ab, rare	Apr. 25	once	tv, sr	c, rare	July '00	tv	ab	Apr. 29	May 10	
Tree sparrow	wv	c			wv			wv	ab		Apr. 10	
Chipping sparrow	sr	ab	Apr. 14	May 10	sr	c		sr	ab	Apr. 14		ye
Field sparrow	sr	ab	Apr	May 19	sr	c		sr	ab	Mar. 31		ye
Slate-colored junco	tv, wv	ab, fc	Mar. 25, May 14		tv, sr	c, oc		tv	ab			
Carolina junco												
Song sparrow	sr	ab	Mar. 20	yes	sr	ab		sr, res	ab, oc			ye
Lincoln sparrow	tv	unc										
Swamp sparrow	sr	c		May 25	sr			sr	c	Apr. 15		ye
Fox sparrow	tv	unc			tv			tv	c	Mar. 23		
Towhee	sr	local		yes	sr	local		sr	ab	Apr. 26		ye
Cardinal	sv	rare										

	RENSSELAER						RICHMOND						
sident or nsient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds
	c					yes	res	unc					yes
	once												
	fc						wv, res	rare				(?)	(?)
	c					yes	res	c					yes
	unc					yes	res	rare				(?)	(?)
	oc						wv	oc					
	c	May 27				yes	sr	c	May 7			Sept. 25	yes
	c				Sept. 25	yes	sr	fc	May 19				
	c	Mar. 16, Apr. 6			Oct	yes	sr	fc	Apr. 1				yes
	unc					yes	wv, tv	unc					
	fc					yes	res	c					yes
	oc			Oct, 6, 25									
	c						tv	unc					
	rare		Mar. 21	Sept. 11, 13									
	c, formerly	Apr. 18				yes	sr, tv	rare, unc					yes
	c	Apr. 24			Oct. 10	yes	sr, wr	c, oc					yes
	fc	May 4				yes	sr	local					yes
	c	May			Aug. 28	yes	tv	c					
	ab	May 1			Oct	yes	sr	c					yes
	c					yes	sr						
	c					yes	sr	fc					yes
	c					yes	sr	c					
	c	Mar. 31, Apr. 3				yes	sr, tv	unc, c					yes
	rare	May 12, 18					tv	unc					
	c					yes	sr	c					yes
	unc	May 31	June 7			(?)	tv	fc					
	oc					yes (?)	sr	unc					yes
	unc	May 20				June 20							
	c					yes	sr	c	Apr. 29				yes
							wv	fc					
	c					yes							
	c					yes	res	fc					yes
				1872									
	c					yes	res	c					yes
							res	fc					yes
							res	c					yes
	c					yes	sr	c, local					yes
	c					yes	sr	c	Mar. 21				yes
	c					yes	sr, wr	c, oc	Mar. 11				yes
	c					yes	sr, wr	fc, local					yes
	fc	May 7			Sept. 25	yes	sr	fc	May 11				yes
	c					yes	sr	fc	Apr. 30				yes
	c						tv, wr	fc, rare					
							sr	fc	Mar. 14				yes
	c	Mar. 2, 13				yes	tv	unc					
	once	Mar. 29	17 Apr. '90										
	oc			Nov. 12			wv	oc					
	ab					yes	res	ab					yes
	c					yes	tv	fc	Mar. 14				
	oc						wv	unc					
							wv	rare					
	oc		Feb. 23	Nov. 6			wv	oc					
s	ab, oc					yes	res	c					yes
	oc			Nov. 27			wv	c, irreg					
	irreg						wv	c		Mar. 9	Nov. 1		
	rare												
	c	Apr. 16				yes	sr, tv	unc, fc					
							wv	local					
	c					yes	tv, wr	c, rare					
	fc					yes	sr	c, local					yes
	local					21 May '90							
							sr	c, local					yes
							tv	fc, local					
							tv	fc, local					
							sr	c					yes
	c						tv	unc					
	ab						tv, wr	c, unc	Mar. 2			Dec. 1	
	ab						wv	c		Mar. 15	Nov. 20		
	ab					yes	sr	c	Mar. 28				yes
	c					yes	sr, wr	c, unc	Apr. 1				yes
r	c, local					yes	wv	c					
	ab	Feb. 22, Mar. 16			Nov. 24	yes	sr, res	ab, fc	Mar. 20				yes
	unc	Apr. 20				yes	sr, wr	c, local, oc					
	c	Mar. 30	Apr. 30	Oct	Nov., Dec. 15		tv	c	Mar. 9				
	c					yes	sr	c	Mar. 28				yes
							res	unc, local					yes

SPECIES RECORDED	OSWEGO				OTSEGO			PUTNAM					RENSSELAER							RICHMOND						
	Resident or transient	Common or rare	Arrives from south	Breeds	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds
Barred owl	res	c		yes	res			res	unc			yes	res	c					yes	res	unc					yes
Great gray owl		rare											av	once												
Richardson owl				yes				tv	oc					fc						wv, res	rare				(?)	(?)
Saw-whet owl	res	unc		yes	res	c		res	c			yes	res	c					yes	res	c					yes
Screech owl	res	c		yes	res			res	fc			yes	res	unc					yes	res	rare				(?)	(?)
Great horned owl	res	c			wv	c, 1889		wv	rare, 2 Dec. '99				wv	oc						wv	oc					
Snowy owl	wv	fc																								
American hawk owl	wv	rare																								
Burrowing owl																										
Carolina paroquet								sr	c	May 3, 12		yes	sr	c	May 27				yes	sr	c	May 7			Sept. 25	yes
Yellow-billed cuckoo	sr	c	May 13	June 2	sr			sr	c	May 8, 13		yes	sr	c				Sept. 25	yes	sr	fc	May 19				
Black-billed cuckoo	sr	c	May 17	yes	sr			sr	c			yes	sr	c	Mar. 16, Apr. 6			Oct	yes	sr	fc	Apr. 1				yes
Belted kingfisher	sr	c	Apr	May	res			res	c			yes	res	unc					yes	wv, tv	unc					
Hairy woodpecker	res	fc		yes	res			res	ab			yes	res	fc					yes	res	c					yes
Downy woodpecker	res	c		yes, May 2									wv	oc			Oct. 6, 25									
Arctic three-toed woodpecker																										
Am. three-toed woodpecker								tv	c				tv	c						tv	unc					
Yellow-bellied sapsucker	tv, sr	ab, fc	Apr. 20, May 12	yes	tv								wv	rare		Mar. 21	Sept. 11, 13									
North. pileated woodpecker		rare						tv	rare				sr	c, formerly	Apr. 18				yes	sr, tv	rare, unc					yes
Red-headed woodpecker	sr	unc		yes	sr																					
Red-bellied woodpecker		rare						sr	c	Mar. 20, Apr. 2		yes	sr	c	Apr. 24			Oct. 10	yes	sr, wr	c, oc					yes
Northern flicker	sr, res	ab, rare	Apr. 9, 20	May 23	sr			sr		Apr. 30		yes	sr	fc	May 4				yes	sr	local					
Whip-poor-will	sr	c		yes	sr			sr	c	May 6		yes	sr	c	May			Aug. 28	yes	tv	c					
Nighthawk	sr		May 15, 17, 22	yes	sr			sr	ab	Apr. 1, 24		yes	sr	ab	May 1			Oct	yes	sr	c					yes
Chimney swift	sr	ab	Apr. 24, 27	yes, June 13	sr			sr	ab	May 7		yes	sr	c					yes	sr						
Ruby-throated humming-bird	sr	c	May 18	June 20	sr			sr	c	Apr. 29, May 3		yes	sr	c						sr	fc					yes
Kingbird	sr	c	May 3, 8	June 8	sr																					
Gray kingbird																			yes	sr	c					
Arkansas kingbird								sr	c	May 7		yes	sr	c	Mar. 31, Apr. 3				yes	sr, tv	unc, c					yes
Crested flycatcher	sr	c	May 4	yes, June 8	sr			sr	c	Mar. 19, 30		yes	tv	rare	May 12, 18					tv	unc					
Phoebe	sr	c	Mar. 29	yes	sr								sr	c					yes	sr	c					yes
Olive-sided flycatcher		rare						sr	c	May 13		yes	tv	unc	May 31	June 7			(?)	tv	fc					
Wood pewee	sr	c		June 15	sr								sr	oc					yes (?)	sr	unc					yes
Yellow-bellied flycatcher		rare											sr	unc	May 20				June 20							
Green-crested flycatcher																			yes	sr	c	Apr. 29				
Alder flycatcher	sr	unc			sr					Apr. 28, 30		yes	sr	c												
Least flycatcher	sr	c	May 6, 8	yes	sr			sr	c											wv	fc					
Skylark													wv													
Horned lark	wv	fc						wv	c										yes							
Hoyt horned lark													sr	c					yes	res	fc					yes
Prairie horned lark	sr	fc		yes				sr					res	c												
Blue jay	res, tv	unc, c		Apr. 30, May 12	res			res	ab			yes														
Canada jay	av												av				1872									yes
Northern raven	av												res	c					yes	res	c					yes
American crow	res	ab		yes	res			res	c			yes	av							res	fc					yes
Fish crow																				res	c					yes
Starling																										
Bobolink	sr	ab		yes	sr			sr	ab	Apr. 30		yes	sr	c					yes	sr	c	Mar. 21				
Cowbird	sr	ab	Mar. 28	May 5, June 2	sr			sr	ab	Mar. 23, Apr. 4		yes	sr	c												
Yellow-headed blackbird													sr	c					yes	sr, wr	c, oc	Mar. 11				yes
Red-winged blackbird	sr	ab	Mar	May 11, June 17	sr			sr	ab	Mar. 16		yes	sr	c					yes	sr, wr	fc, local					yes
Meadowlark	sr	ab	Mar. 18, 27	May 24	sr			sr	ab			yes	sr	c				Sept. 25	yes	sr	fc	May 11				yes
Orchard oriole	sr	unc			sr			sr	c	May 2, 4		yes	sr	fc	May 7				yes	sr	fc	Apr. 30				
Baltimore oriole	sr	ab	May 4	May 30, June 12	sr	c		sr	ab	May 3			sr	c												
Bullock oriole																				tv, wr	fc, rare					yes
Rusty blackbird	tv	c			tv			tv	c				tv	c						sr	fc	Mar. 14				
Purple grackle								sr	ab	Mar. 13, 23		yes								tv	unc					
Bronzed grackle	sr	ab	Mar. 28	yes, May 4	sr	c		tv	c	Mar. 17			sr	c	Mar. 2, 13				yes							
Evening grosbeak													wv	once	Mar. 29	17 Apr. '90				wv	oc					yes
Pine grosbeak	wv	oc						wv	oc	Jan. '96			wv	oc			Nov. 12				ab					
House sparrow	res	ab		yes	res	ab	yes	res	ab			yes	res	ab					yes	res						
Chaffinch																										
Greenfinch																			yes	tv	fc	Mar. 14				
Purple finch	sr	c	Apr. 5	yes	sr			sr	c	Apr		yes	sr	c						wv	unc					
American crossbill	wv	oc			wv	oc		wv	oc				wv	oc						wv	rare					
White-winged crossbill								wv	rare				wv													
Hoary redpoll													wv	oc		Feb. 23	Nov. 6			wv	oc					
Redpoll	wv	fc						wv	c	irreg																
Holboell redpoll																										
Greater redpoll																			yes	res	c					yes
European linnet													sr, res	ab, oc						wv	c, irreg					
American goldfinch	res	c		yes, June 12	sr	c		sr, res	ab, oc	Apr. 24		yes	wv	oc			Nov. 27									
Pine siskin	wv	oc						wv	oc											wv	c		Mar. 9	Nov. 1		
European goldfinch													wv	irreg												
Snowflake	wv	c			wv			wv	ab				wv	rare												
Lapland longspur	wv	rare																	yes	sr, tv	unc, fc					
Chestnut-collared longspur													sr	c	Apr. 16					wv	local					
Vesper sparrow	sr	ab	Apr. 1	yes	sr	c		sr	ab			yes							yes	tv, wr	c, rare					
Ipswich sparrow													sr	c												y
Savanna sparrow	sr	fc	Apr	yes	sr	fc													yes	sr	c, local					
Baird sparrow																			21 May '90							
Grasshopper sparrow								sr	c			yes	sr	fc												yes
Henslow sparrow													sr	local						sr	c, local					
Leconte sparrow																				tv	fc, local					
Sharp-tailed sparrow																				tv	fc, local					yes
Nelson sparrow																				sr	c					
Acadian sharp-tailed sparrow																										
Seaside sparrow																				tv	unc					
Lark sparrow																										
White-crowned sparrow	tv	c	May 12		tv			tv	c	May 2	May 15		tv	c						tv, wr	c, unc	Mar. 2	Mar. 15	Nov. 20	Dec. 1	
Gambel sparrow																				wv	c					yes
White-throated sparrow	tv, sr	ab, rare	Apr. 25	once	tv, sr	c, rare	July '00	tv	ab	Apr. 29	May 10		tv	ab						sr	c	Mar. 28				yes
Tree sparrow	wv	c			wv			wv	ab		Apr. 10		wv	ab					yes	sr, wr	c, unc	Apr. 1				
Chipping sparrow	sr	ab	Apr. 14	May 10	sr	c		sr	ab	Apr. 14		yes	sr	ab					yes	wv	c					yes
Field sparrow	sr	ab	Apr	May 19	sr	c		sr	ab	Mar. 31		yes	sr	c					yes							
Slate-colored junco	tv, wv	ab, fc	Mar. 25, May 14		tv, sr	c, oc		tv	ab				tv, sr	c, local						sr, res	ab, fc	Mar. 20				
Carolina junco																		Nov. 24	yes							
Song sparrow	sr	ab	Mar. 20	yes	sr	ab		sr, res	ab, oc			yes	sr	ab	Feb. 22, Mar. 16					sr, wr	c, local, oc					
Lincoln sparrow	tv	unc																	yes	tv	c	Mar. 9				yes
Swamp sparrow	sr	c		May 25	sr			sr	c	Apr. 15		yes	sr	unc	Apr. 20					sr	c	Mar. 28				yes
Fox sparrow	tv	unc			tv			tv	c	Mar. 23			tv	c	Mar. 30	Apr. 30	Oct	Nov., Dec. 15	yes	res	unc, local					
Towhee	sr	local		yes	sr	local		sr	ab	Apr. 26		yes	sr	c												
Cardinal	sv	rare																								

SPECIES RECORDED	ROCKLAND							ST LAWRENCE			
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for north	Breeds	Resident or transient	Common or rare	Arrives from south	Breed
Barred owl	res	unc						res			yes
Great gray owl								wv	rare		
Richadson owl											
Saw-whet owl	wv	rare						res			
Screech owl	res	c					yes	res			yes
Great horned owl	res	unc						res			
Snowy owl	wv	rare						wv	oc		
American hawk owl								wv	oc		
Burrowring owl											
Carolina paroquet											
Yellow-billed cuckoo	sr	fc	May 10			Sept. 21	June 1	sr	fc	May 19	yes
Black-billed cuckoo	sr	c	May 3				May 20, June 10	sr			
Belted kingfisher	sr	fc					yes	sr	fc	Apr. 21	yes
Hairy woodpecker	wv	unc						res	fc		yes
Downy woodpecker	res	c					yes	res	c		yes
Arctic three-toed woodpecker								res	local		yes
Am. three-toed woodpecker											
Yellow-bellied sapsucker	tv	fc						sr	c	Apr	yes
North. pileated woodpecker								res	unc, local		yes
Red-headed woodpecker								res, sr	oc, fc		yes
Red-bellied woodpecker											
Northern flicker	sr, res	c, oc					May 4	sr	c	Apr. 25	yes
Whip-poor-will	sr	rare	Apr. 30				yes	sr	fc		
Nighthawk	sr	unc						sr	c	May 20	yes
Chimney swift	sr	ab	Apr. 20				yes	sr	c		yes
Ruby-throated hummingbird	sr	fc					June 3	sr	c	May 20	yes
Kingbird	sr	c	May 1			Oct. 25	yes	sr	c		yes
Gray kingbird											
Arkansas kingbird											
Crested flycatcher	sr	fc	May 3				yes	sr	unc	May 4	yes
Phoebe	sr	ab	Mar. 25			Oct. 30	yes	sr	c	Apr	yes
Olive-sided flycatcher								sr	local		yes
Wood pewee	sr	c	May 15			Sept. 25	yes	sr	c	May 18	yes
Yellow-bellied flycatcher											
Green-crested flycatcher	sr	unc					yes				
Alder flycatcher	tv, sr	fc, rare	May				June 22				
Least flycatcher	sr	c	May 12			Oct. 1	yes	sr	c	May 4	yes
Skylark											
Horned lark	wv	unc									
Hoyt horned lark											
Prairie horned lark								sr	c		yes
Blue jay	res	c					yes	res	c		yes
Canada jay											
Northern raven											
American crow	res	c					yes	sr, res	c, oc		yes
Fish crow											
Starling											
Bobolink	sr	fc	May 15				yes	sr	c	May 13	yes
Cowbird	sr	c	Mar. 29			Nov. 15	yes	sr	c		yes
Yellow-headed blackbird											
Red-winged blackbird	sr	ab	Mar. 16			Nov. 20	yes	sr	ab		yes
Meadowlark	sr	fc	Mar. 17				yes	sr	c		yes
Orchard oriole	sr	fc	May 5				yes				
Baltimore oriole	sr	ab	May 4			Sept. 30	yes	sr	ab	May 4	yes
Bullock oriole											
Rusty blackbird	tv							tv	c		
Purple grackle	sr						yes				
Bronzed grackle								sr	ab	Mar. 29	yes
Evening grosbeak	wv	oc									
Pine grosbeak	wv	rare						wv	fc	Mar. 17	
House sparrow	res	ab					yes	res	ab		yes
Chaffinch											
Greenfinch											
Purple finch	tv, res	c, unc					yes	sr			yes
American crossbill	wv	oc						wv	fc	Mar. 17	
White-winged crossbill	wv	rare						wv	rare		
Hoary redpoll											
Redpoll	wv	oc						wv	oc		
Holboell redpoll											
Greater redpoll											
European linnet											
American goldfinch	res	c					yes	sr	ab		yes
Pine siskin											
European goldfinch											
Snowflake	wv							wv	c	Mar. 17	
Lapland longspur											
Chestnut-collared longspur											
Vesper sparrow	sr	fc					yes	sr	fc		yes
Ipswich sparrow											
Savanna sparrow	tv, sr	c, rare					yes	sr			yes
Baird sparrow											
Grasshopper sparrow											
Henslow sparrow	sr	local					23 May '97				
Leconte sparrow											
Sharp-tailed sparrow	sr	fc, local	May 4								
Nelson sparrow											
Acadian sharp-tailed sparrow											
Seaside sparrow	sr	fc, local	May 4				yes				
Lark sparrow											
White-crowned sparrow	tv	c		May				tv			
Gambel sparrow											
White-throated sparrow	tv, wv	ab, oc		Apr. 20	Oct. 15			tv, sr	c, local	Apr. 21, May 6	yes
Tree sparrow	wv	fc		Apr. 10	Oct. 25			wv	c		
Chipping sparrow	sr	c	Apr. 2			Nov. 10	yes	sr	c		yes
Field sparrow	sr	c	Apr. 3			Nov. 19	May 1	sr	fc		yes
Slate-colored junco	wv	ab		May 1	Sept. 24, Oct. 15			sr, res	local, oc		yes
Carolina junco											
Song sparrow	sr, res	ab, oc	Mar. 10, 15			Nov	yes	sr	ab		yes
Lincoln sparrow											
Swamp sparrow	sr	ab					yes	sr			yes
Fox sparrow	tv, wv	fc, oc			Oct. 30	Dec. 1		tv			
Towhee	sr	c	May 1			Nov. 10	May 20	sr	oc		yes
Cardinal	res	unc					yes				

SARATOGA							SCHENECTADY			
lent ent	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Breeds
	c					yes	res			
	oc						tv			
	c					May 1	res	c		yes
	fc					yes	res	rare		
	oc									
	rare									
	fc	May 15			Sept. 1	June 1	sr			
	c	May 5, 15			Sept. 15	May 23, June 12	sr			
	c	Apr. 4, 18			Oct. 17	May 1	sr	c		yes
	fc					yes	res			yes
	ab					yes	res	c		yes
	rare									
	fc	Apr. 5, 16, 27					tv	fc	Apr. 14	
	rare			Dec. 29						
	unc	May 3, 9				yes				
	c	Apr. 5, 16, 27			Sept. 30, Oct. 12	yes	sr	ab	Apr. 21	yes
	c	Apr. 24, May 1, 13			Sept	yes	sr	local		
	c	May 12, 18, 27			Sept. 1, 14	yes	sr			
	ab	Apr. 19, 24, May 5			Sept. 30, Oct. 9	yes	sr	ab	Apr. 28	yes
	c	May 9, 14			Aug. 31, Sept. 19	May 26, June 12	sr	fc		yes
	c	May 2, 8			Sept. 1, 12	May 23, June 10	sr	c	May 10	yes
	fc	May 2, 10			Aug. 15, Sept. 9, 29	yes	sr			
	c	Mar. 20, Apr. 1, 9			Oct. 8, 17	Apr. 18, May 10	sr	c	Apr. 7	yes
	fc	May 14, 19, 24			Sept. 30	June 20, 25	sr			yes
	oc				Sept. 15					
	ab	Apr. 25, 29, May 9			Aug. 1	May 26, June 15	sr			
	oc									
	fc	Mar. 1, 20				yes	sr			
	c					May 17	res			
	ab					Apr. 30	res	ab		yes
	c	May 3, 8				June 1	sr			yes
	c	Mar. 26, Apr. 8				yes	sr			yes
	c	Mar. 20, Apr. 4				yes	sr			yes
	c	Mar. 1, 21			Sept. 30, Oct. 10	yes	sr			yes
	oc					June '90				
	ab	May 3, 7, 11			Sept. 1, 7	May 15, 30	sr		May 7	yes
	c	Apr. 15			Nov. 1		tv			
	c	Mar. 10, 24			Oct. 31	yes	sr		Mar. 31	yes
	rare		30 Mar. '90							
	fc			9 Nov. '03						
	ab					yes	res	ab		yes
	c	Mar. 18, 21				yes	sr			yes
	oc						wv	oc		
	oc			12 Nov. '80						
	fc		Apr. 1	Nov. 15, 27			wv	oc		
	rare			23 Jan. '99						
	ab, oc					July 15	sr	ab		yes
	oc	20 Jan. '81								
	c						wv	c		
	rare		13 Feb. '05							
	ab	Apr. 1, 15			Oct. 15, 25	May 5, 15	sr	c		yes
							sr			
	fc	Apr. 30, May 9			Oct. 31		tv			
	c, oc	Apr. 20, 30	May 18		Oct. 15, 30	local	tv	c		
	c		Apr. 15	Oct. 1			wv	c		
	ab	Mar. 28, Apr. 11, 20			Oct. 15, 30	May 1, 20	sr	c		
	c	Apr			Oct. 18	May 20, 30	sr			
	c, ab		Apr. 30, May 15	Sept. 30		(?)	tv, wv	ab, fc		
	ab	Mar. 7, 21			Oct. 15, 30	May 10	sr	ab		
	unc	Apr. 20				May 27	sr	unc		
	fc	Apr. 1, 15			Nov. 15		tv			
	local	May 1			Oct	yes	sr			

SPECIES RECORDED	ROCKLAND							ST LAWRENCE				SARATOGA							SCHENECTADY			
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for north	Breeds	Resident or transient	Common or rare	Arrives from south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Breeds
Barred owl	res	unc						res			yes	res						yes	res			
Great gray owl								wv	rare													
Richadson owl																						
Saw-whet owl	wv	rare						res				tv	oc						tv			
Screech owl	res	c						res			yes	res	c					May 1	res	c		yes
Great horned owl	res	unc						res				res	fc					yes	res	rare		
Snowy owl	wv	rare						wv	oc			wv	oc									
American hawk owl								wv	oc			wv	rare									
Burrowing owl																						
Carolina paroquet																						
Yellow-billed cuckoo	sr	fc	May 10			Sept. 21	June 1	sr	fc	May 19	yes	sr	fc	May 15			Sept. 1	June 1	sr			
Black-billed cuckoo	sr	c	May 3				May 20, June 10	sr				sr	c	May 5, 15			Sept. 15	May 23, June 12	sr			
Belted kingfisher	sr	fc					yes	sr	fc	Apr. 21	yes	sr	c	Apr. 4, 18			Oct. 17	May 1	sr	c		yes
Hairy woodpecker	wv	unc						res	fc		yes	res	fc					yes	res			yes
Downy woodpecker	res	c					yes	res	c		yes	res	ab					yes	res	c		yes
Arctic three-toed woodpecker								res	local		yes	wv	rare									
Am three-toed woodpecker																						
Yellow-bellied sapsucker	tv	fc						sr	c	Apr	yes	tv	fc	Apr. 5, 16, 27					tv	fc	Apr. 14	
North. pileated woodpecker								res	unc, local		yes	wv	rare			Dec. 29						
Red-headed woodpecker								res, sr	oc, fc		yes	sr	unc	May 3, 9				yes				
Red bellied woodpecker																						
Northern flicker	sr, res	c, oc					May 4	sr	c	Apr. 25	yes	sr	c	Apr. 5, 16, 27			Sept. 30, Oct. 12	yes	sr	ab	Apr. 21	yes
Whip-poor-will	sr	rare	Apr. 30				yes	sr	fc			sr	c	Apr. 24, May 1, 13			Sept.	yes	sr	local		
Nighthawk	sr	unc						sr	c	May 20	yes	sr	c	May 12, 18, 27			Sept. 1, 14	yes	sr			
Chimney swift	sr	ab	Apr. 20				yes	sr	c		yes	sr	ab	Apr. 19, 24, May 5			Sept. 30, Oct. 9	yes	sr	ab	Apr. 28	yes
Ruby-throated hummingbird	sr	fc					June 3	sr	c	May 20	yes	sr	c	May 9, 14			Aug. 31, Sept. 19	May 26, June 12	sr	fc		yes
Kingbird	sr	c	May 1			Oct. 25	yes	sr	c		yes	sr	c	May 2, 8			Sept. 1, 12	May 23, June 10	sr	c	May 10	yes
Gray kingbird																						
Arkansas kingbird																						
Crested flycatcher	sr	fc	May 3				yes	sr	unc	May 4	yes	sr	fc	May 2, 10			Aug. 15, Sept. 9, 29	yes	sr			
Phoebe	sr	ab	Mar. 25			Oct. 30	yes	sr	c	Apr	yes	sr	c	Mar. 20, Apr. 1, 9			Oct. 8, 17	Apr. 18, May 10	sr	c	Apr. 7	yes
Olive-sided flycatcher								sr	local		yes											
Wood pewee	sr	c	May 15			Sept. 25	yes	sr	c	May 18	yes	sr	fc	May 14, 19, 24			Sept. 30	June 20, 25	sr			yes
Yellow-bellied flycatcher												tv	oc				Sept. 15					
Green-crested flycatcher	sr	unc																				
Alder flycatcher	tv, sr	fc, rare	May				yes															
Least flycatcher	sr	c	May 12			Oct. 1	June 22	sr	c	May 4	yes	sr	ab	Apr. 25, 29, May 9			Aug. 1	May 26, June 15	sr			
Skylark							yes															
Horned lark	wv	unc										wv	oc									
Hoyt horned lark																						
Prairie horned lark																						
Blue jay	res	c						sr	c		yes	sr	fc	Mar. 1, 20				yes	sr			
Canada jay							yes	res	c		yes	res	c					May 17	res			
Northern raven																						
American crow	res	c																				
Fish crow							yes	sr, res	c, oc		yes	res	ab					Apr. 30	res	ab		yes
Starling																						
Bobolink	sr	fc	May 15				yes	sr	c	May 13	yes	sr	c	May 3, 8				June 1	sr			yes
Cowbird	sr	c	Mar. 29			Nov. 15	yes	sr	c		yes	sr	c	Mar. 26, Apr. 8				yes	sr			yes
Yellow-headed blackbird																						
Red-winged blackbird	sr	ab	Mar. 16			Nov. 20	yes	sr	ab		yes	sr	c	Mar. 20, Apr. 4				yes	sr			yes
Meadowlark	sr	fc	Mar. 17				yes	sr	c		yes	sr	c	Mar. 1, 21			Sept. 30, Oct. 10	yes	sr			yes
Orchard oriole	sr	fc	May 5				yes					sr	oc					June '90				
Baltimore oriole	sr	ab	May 4			Sept. 30	yes	sr	ab	May 4	yes	sr	ab	May 3, 7, 11			Sept. 1, 7	May 15, 30	sr		May 7	yes
Bullock oriole																						
Rusty blackbird	tv							tv	c			tv	c	Apr. 15			Nov. 1		tv			
Purple grackle	sr						yes															
Bronzed grackle																						
Evening grosbeak	wv	oc						sr	ab	Mar. 29	yes	sr	c	Mar. 10, 24			Oct. 31	yes	sr		Mar. 31	yes
Pine grosbeak	wv	rare										wv	rare		30 Mar. '90							
House sparrow	res	ab						wv	fc	Mar. 17		wv	fc			9 Nov. '03						
Chaffinch							yes	res	ab		yes	res	ab					yes	res	ab		yes
Greenfinch																						
Purple finch	tv, res	c, unc										sr	c	Mar. 18, 21				yes	sr			yes
American crossbill	wv	oc					yes	sr			yes	wv	oc						wv	oc		
White-winged crossbill	wv	rare						wv	fc	Mar. 17		wv	oc			12 Nov. '80						
Hoary redpoll								wv	rare													
Redpoll	wv	oc										wv	fc		Apr. 1	Nov. 15, 27			wv	oc		
Holboell redpoll								wv	oc													
Greater redpoll												wv	rare			23 Jan. '99						
European linnet																						
American goldfinch	res	c					yes	sr	ab		yes	sr, res	ab, oc					July 15	sr	ab		yes
Pine siskin												wv	oc	20 Jan. '81								
European goldfinch																						
Snowflake	wv											wv	c						wv	c		
Lapland longspur								wv	c	Mar. 17		wv	rare		13 Feb. '05							
Chestnut-collared longspur																						
Vesper sparrow	sr	fc										sr	ab	Apr. 1, 15			Oct. 15, 25	May 5, 15	sr	c		yes
Ipswich sparrow							yes	sr	fc		yes											
Savanna sparrow	tv, sr	c, rare																				
Baird sparrow							yes	sr			yes								sr			
Grasshopper sparrow																						
Henslow sparrow	sr	local																				
Leconte sparrow							23 May '97															
Sharp-tailed sparrow																						
Nelson sparrow	sr	fc, local	May 4																			
Acadian sharp-tailed sparrow																						
Seaside sparrow	sr	fc, local	May 4																			
Lark sparrow																						
White-crowned sparrow	tv	c		May			yes															
Gambel sparrow																						
White-throated sparrow	tv, wv	ab, oc						tv				tv	fc	Apr. 30, May 9			Oct. 31		tv			
Tree sparrow	wv	fc		Apr 20	Oct 15																	
Chipping sparrow	sr	c	Apr 2	Apr. 10	Oct 25			tv, sr	c, local	Apr. 21, May 6	yes	tv, sr	c, oc	Apr. 20, 30	May 18		Oct 15, 30	local	tv	c		
Field sparrow	sr	c	Apr 3			Nov. 10	yes	wv	c			wv	c		Apr. 15	Oct. 1			wv	c		
Slate-colored junco	wv	ab		May 1	Sept 24, Oct. 15	Nov. 19	May 1	sr	c		yes	sr	ab	Mar. 28, Apr. 11, 20			Oct. 15, 30	May 1, 20	sr	c		
Carolina junco								sr	fc		yes	sr	c	Apr.			Oct. 18	May 20, 30	sr			
Song sparrow	sr, res	ab, oc	Mar 10, 15					sr, res	local, oc		yes	wv, tv	c, ab		Apr. 30, May 15	Sept. 30		(?)	tv, wv	ab, fc		
Lincoln sparrow						Nov	yes										Oct. 15, 30	May 10	sr	ab		
Swamp sparrow	sr	ab						sr	ab		yes	sr	ab	Mar. 7, 21								
Fox sparrow	tv, wv	fc, oc					yes											May 27	sr	unc		
Towhee	sr	c	May 1		Oct. 30	Dec. 1		sr			yes	sr	unc	Apr. 20			Nov. 15		tv			
Cardinal	res	unc				Nov. 10	May 20	tv				tv	fc	Apr. 1, 15			Oct.	yes	sr			
							yes	sr	oc		yes	sr	local	May 1								

SPECIES RECORDED	SCHOHARIE				SCHUYLER			SENECA				
	Resident or transient	Common or rare	Arrives from south	Breeds	Resident or transient	Common or rare	Breeds	Resident or transient	Resident or rare	Arrives from south	Departs for south	
Barred owl	res				res	unc		res	fc			yes
Great gray owl												
Richardson owl												
Saw-whet owl												
Screech owl	res	c			res	c	yes	res	c			yes
Great horned owl	res				res	c	yes	res	unc			
Snowy owl	wv	oc, c, 1890			wv	oc		wv	oc			
American hawk owl												
Burrowing owl												
Carolina paroquet												
Yellow-billed cuckoo	sr			yes	sr	fc	yes	sr				yes
Black-billed cuckoo	sr			yes	sr	fc	yes	sr				yes
Belted kingfisher	sr	c	Apr. 12	yes	sr	c	yes	sr	c			yes
Hairy woodpecker	res			yes	res		yes	res	fc			yes
Downy woodpecker	res	c		yes	res	c	yes	res	c			yes
Arctic three-toed woodpecker												
Am. three-toed woodpecker												
Yellow-bellied sapsucker	tv				tv, sr	c	yes	tv	c			
North. pileated woodpecker												
Red-headed woodpecker	sr			yes	sr		yes	sr				yes
Red-bellied woodpecker												
Northern flicker	sr	c		yes	sr	c	yes	sr	c			yes
Whip-poor-will	sr	local			sr	local	yes	sr	local			
Nighthawk	sr				tv, sr	fc, rare	yes	tv, sr	fc, oc			
Chimney swift	sr	c		yes	sr	c	yes	sr	c			yes
Ruby-throated hummingbird	sr	fc		yes	sr	c	yes	sr	c			yes
Kingbird	sr	c	May 12	yes	sr	c	yes	sr	c			yes
Gray kingbird												
Arkansas kingbird												
Crested flycatcher	sr			yes	sr	fc	yes	sr				yes
Phoebe	sr	c		yes	sr	c	yes	sr	c			yes
Olive-sided flycatcher												
Wood pewee	sr	c		yes	sr	c	yes	sr	c			yes
Yellow-bellied flycatcher												
Green-crested flycatcher												
Alder flycatcher								sr	unc			
Least flycatcher	sr				sr			sr				
Skylark												
Horned lark												
Hoyt horned lark												
Prairie horned lark	sr				sr			sr	c			yes
Blue jay	res				res			res				
Canada jay												
Northern raven												
American crow	res	c		yes	res	c	yes	res	ab			yes
Fish crow												
Starling												
Bobolink	sr	c		yes	sr	c	yes	sr	c			yes
Cowbird	sr	c		yes	sr	c	yes	sr	c	Mar. 25		yes
Yellow-headed blackbird												
Red-winged blackbird	sr	c		yes	sr	ab	yes	sr	ab	Mar. 5, 17		yes
Meadowlark	sr	c		yes	sr, res	c, oc	yes	sr, res	c, oc			yes
Orchard oriole												
Baltimore oriole	sr	c	May 3, 8	yes	sr	c	yes	sr	c			yes
Bullock oriole												
Rusty blackbird	tv				tv	c, fall		tv	c, fall		Oct. 25, Nov. 10	
Purple grackle												
Bronzed grackle	sr	c	Mar. 30	yes	sr	c, Mar.	yes	sr, tv	c ab	Mar. 1, 17	Oct. 20, Nov. 5	yes
Evening grosbeak								wv	once			
Pine grosbeak					wv	oc		wv	oc			
House sparrow	res	ab		yes	res	ab	yes	res	ab			yes
Chaffinch												
Greenfinch												
Purple finch	sr				sr	ab	yes	sr		Apr.		yes
American crossbill	wv	oc			wv	oc		wv	oc			
White-winged crossbill												
Hoary redpoll												
Redpoll	wv	oc			wv	oc		wv	oc			
Holboell redpoll												
Greater redpoll												
European linnet												
American goldfinch	sr	c		yes	sr, res	c, oc	yes	sr, res	ab, oc			yes
Pine siskin												
European goldfinch												
Snowflake	wv				wv			wv	c			
Lapland longspur												
Chestnut-collared longspur												
Vesper sparrow	sr	c		yes	sr	c	yes	sr	ab			yes
Ipswich sparrow												
Savanna sparrow	sr	fc		yes	sr	fc	yes	sr	fc			yes
Baird sparrow												
Grasshopper sparrow												
Henslow sparrow												
Leconte sparrow												
Sharp-tailed sparrow												
Nelson sparrow												
Acadian sharp-tailed sparrow												
Seaside sparrow												
Lark sparrow												
White-crowned sparrow	tv				tv			tv				
Gambel sparrow												
White-throated sparrow	tv				tv			tv	c			
Tree sparrow	wv	c			wv	c		wv	c			
Chipping sparrow	sr	c		yes	sr	c	yes	sr	c			yes
Field sparrow	sr	c		yes	sr	c	yes	sr	c			yes
Slate-colored junco	tv	c			tv	ab		tv	ab			
Carolina junco												
Song sparrow	sr	ab		yes	sr, res	ab, oc	yes	sr, res	ab, oc			yes
Lincoln sparrow												
Swamp sparrow	sr				sr	c	yes	sr	ab			yes
Fox sparrow					tv			tv	fc			
Towhee					sr		yes	sr				
Cardinal												

STEUBEN					SUFFOLK				
dent r sient	Common or rare	Arrives from south	Leaves for north	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north
	c			yes	res	rare			
	once	10 Feb. '87			av	once			
	oc				wv, res	fc, oc		Feb. 14, Mar. 16	Nov. 3, 20
	c			yes	res	c			
	fc			yes	res	c, local			
	oc				wv	c, irreg		Feb. 3, Mar. 17, Apr. 14	Oct. 17, Nov. 16, 29
	fc			yes	sr	c	May 11, 12, 28		
	fc			yes	sr	c	May 7, 20, 24		
				yes	sr, res	c, oc	Mar. 11, Apr. 6, 15		
				yes	res	unc, c			
				yes	res	c			
					av	twice			fall, 1887
	fc, unc	Apr. 9		yes	tv	c	Mar. 3, Apr. 12, 14	May 1, 6	Sept. 26, Oct. 1
	rare				1850 (last)				
	irreg			yes	tv, res	c, irreg; rare	Apr. 8	May 12, 17	Sept. 18, 23
	rare					rare			
	ab	Mar. 31, Apr. 5		yes	sr, res	ab, oc	Feb. 12, Mar. 27, Apr. 18		
	c			yes	sr	c	Apr. 16, 27, May 6		
	c			yes	sr, tv	c, ab	May 4, 6, 30		
	ab	Apr. 28		yes	sr	ab	Apr. 24, May 6, 10		
	c	May 8		yes	sr	c	May 4, 10, 18		
	c	May 9, 13		yes	sr	c	Apr. 21, 30, May 10		
					av	once			
	c	May 7		yes	sr	c	Apr. 24, May 5, 12		
	c	Mar. 29		yes	sr	ab	Mar. 15, 31, Apr. 5		
	rare	May 9			tv	unc	May 15		Aug. 29
	ab			yes	sr	c	May 7, 12, 22		
	rare				tv	rare	May 24	May 30	Aug
	rare	3 May '05			sr	unc, local			
	unc				tv	unc			
	fc	May 5		yes	sr	c	May 6, 11, 14		
					tv, wv	ab, c		Apr.	Oct., Nov. 3
					tv	rare	Feb. 23	Mar. 7	
	c			yes	tv	unc			
	c			yes	res	c			
					av				1836
	ab			yes	res	ab			
					sr	rare	Mar. 16, Apr. 20		
					res	local			
	c			yes	sr, tv	c, local; ab	May 1		
	c			yes	sr, res	c, oc	Mar. 10, 24, Apr. 19		
	ab	Mar.		yes	sr	ab	Feb. 19, Mar. 12, 14		
	c	Mar. 22		yes	sr, res	c, fc	Feb. 5, 11, Mar. 18		
	rare				sr	fc	May 1, 6, 10		
	c	May 3, 4		yes	sr	c	Apr. 29, May 3, 10		
	c, Oct. 25	Apr. 1	May 9		tv	c	Mar. 21, Apr. 9, 12	May 8, 22	Oct. 7, 17, 22
					sr, wv	ab, rare	Feb. 18, Mar. 7, Apr. 6		
	c, oc	Mar.		yes	tv	oc	Mar. 13, 29		
	once		Feb. '90						
	oc, 1878, '79				wv	rare		Feb. 11	Nov. 28, Dec. 22
	ab			yes	res	ab			
	fc	Mar. 31, Apr. 11		yes	sr, wv	fc, unc	Mar. 13, Apr. 11, 26		
	oc				wv, res	oc, rare		Apr. 5, 23, June 3	Nov. 20, Dec. 18
	oc				wv	rare, ab, 1899		Jan. 18, Feb. 20	Nov. 7, 20
	oc				wv	fc, irreg		Mar. 19, 25, 31	Nov. 24, Dec. 10
					wv	oc			
	ab, oc			yes	res, sr	c, ab	Feb. 4, 22, Mar. 26		
					wv, tv	fc, irreg; ab		May 3, 15	Oct. 4, 12
					wv	c		Mar. 6, 12, 24	Oct. 23, Nov. 1, 24
					wv	rare		Feb. 7, 28, Apr. 18	Oct. 18, Nov. 26, Dec. 28
					av				14 Sept. '91
	c			yes	sr, res	ab, oc	Mar. 25, Apr. 5, 13		
					wv	rare, spring; c, local		Mar. 19, 25, Apr. 10	Oct. 12, 19, 23
	fc	Mar. 28		yes	sr, res	c, fc	Mar. 29, Apr. 2, 10		
					av	once			13 Nov. '99
	c			yes	sr	fc	May 6, 9, 12		
					?				
					sr, res	c, oc	Apr. 18, 29		
					tv				
					sr	ab	Apr. 22, May 2, 13		
					av				July 28, Aug. 20
		Apr. 28, May 7			tv	unc	Apr. 25, May 9		Sept. 26, Oct. 10
	c, rare	Apr. 23, 30		yes	tv, wv	ab, fc	Feb. 24, Mar. 5, Apr. 18	May 5, 9, 20	Sept. 29, Oct. 11, 14
	c				wv	ab		Apr. 3, 10, 22	Oct. 9, 16, Nov. 2
	c	Mar. 30, Apr. 5, 12		yes	sr	ab	Feb. 17, Mar. 30, Apr. 22		
	c	Mar. 31, Apr. 12		yes	sr, res	c, oc	Feb. 6, Mar. 20, Apr. 17		
	ab, oc				tv, wv	ab, c	Mar.	Apr. 4, 20, May 10	Sept. 14, 26, Oct. 18
	ab	Mar. 16		yes	sr, res	ab, fc	Feb. 3, 22, Mar. 15		
					tv	unc	May 9	May 19, June 3	Sept. 17, 28
		Mar. 30, Apr. 14		yes	sr, res	fc, oc	Mar. 31, Apr. 12, 15		
					tv, wv	ab, unc	Feb. 22, Mar. 13, 22	Apr. 12, 30	Oct. 12, 22, 24
	c	Apr. 5, 28		yes	sr	c	Apr. 16, May 5, 12		
					res	rare			

SPECIES RECORDED	SCHOHARIE				SCHUYLER			SENECA					STEUBEN					SUFFOLK				
	Resident or transient	Common or rare	Arrives from south	Breeds	Resident or transient	Common or rare	Breeds	Resident or transient	Resident or rare	Arrives from south	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north
Barred owl	res				res	unc.		res	fc			yes	res	c			yes	res	rare			
Great gray owl													av	once	10 Feb. '87			av	once			
Richardson owl													tv	oc				wv, res	fc, oc		Feb. 14, Mar. 10	Nov. 3, 20
Saw-whet owl					res	c	yes	res	c			yes	res	c			yes	res	c			
Screech owl	res				res	c	yes	res	unc				res	fc			yes	res	c, local			
Great horned owl	res				wv	oc		wv	oc				wv	oc				wv	c, irreg.		Feb. 3, Mar. 17, Apr. 14	Oct. 17, Nov. 16, 20
Snowy owl	wv	oc, c, 1890																				
American hawk owl																						
Burrowing owl																						
Carolina paroquet													sr	fc			yes	sr	c	May 11, 12, 28		
Yellow-billed cuckoo	sr			yes	sr	fc	yes	sr				yes	sr	fc			yes	sr	c	May 7, 20, 24		
Black-billed cuckoo	sr				sr	fc	yes	sr	c			yes	sr				yes	sr, res	c, oc	Mar. 11, Apr. 6, 15		
Belted kingfisher	sr	c	Apr. 12	yes	sr	c	yes	res	fc			yes	res				yes	res	unc, c			
Hairy woodpecker	res			yes	res		yes	res	c			yes	res				yes	res	c			
Downy woodpecker	res	c		yes	res	c	yes											av	twice			fall, 1887
Arctic three-toed woodpecker																						
Am. three-toed woodpecker													tv, sr	fc, unc	Apr. 6		yes	tv	c	Mar. 3, Apr. 12, 14	May 1, 6	Sept. 26, Oct. 1
Yellow-bellied sapsucker	tv				tv, sr	c	yes	tv	c					rare				1850 (last)				
North. pileated woodpecker													sr	irreg			yes	tv, res	c, irreg, rare	Apr. 8	May 12, 17	Sept. 18, 23
Red-headed woodpecker	sr			yes	sr		yes	sr				yes		rare					rare			
Red-bellied woodpecker													sr	ab	Mar. 31, Apr. 5		yes	sr, res	ab, oc	Feb. 12, Mar. 27, Apr. 18		
Northern flicker	sr	c		yes	sr	c	yes	sr	c			yes	sr	c			yes	sr	c	Apr. 16, 27, May 6		
Whip-poor-will	sr	local			sr	local	yes	sr	local				sr	c			yes	sr, tv	c, ab	May 4, 6, 30		
Nighthawk	sr				tv, sr	fc, rare	yes	tv, sr	fc, oc			yes	sr	ab	Apr. 28		yes	sr	ab	Apr. 24, May 6, 10		
Chimney swift	sr	c		yes	sr	c	yes	sr	c			yes	sr	c	May 8		yes	sr	c	May 4, 10, 18		
Ruby-throated hummingbird	sr	fc		yes	sr	c	yes	sr	c			yes	sr	c	May 9, 13		yes	sr	c	Apr. 21, 30, May 10		
Kingbird	sr	c	May 12	yes	sr	c	yes	sr	c									av	once			
Gray kingbird																						
Arkansas kingbird																						
Crested flycatcher	sr			yes	sr	fc	yes	sr	fc			yes	sr	c	May 7		yes	sr	c	Apr. 24, May 5, 12		
Phoebe		c		yes	sr	c	yes	sr	c			yes	sr	c	Mar. 29		yes	sr	ab	Mar. 15, 31, Apr. 5		
Olive-sided flycatcher													tv	rare	May 9			tv	unc	May 15		Aug. 29
Wood pewee	sr	c		yes	sr	c	yes	sr	c			yes	sr	ab			yes	sr	c	May 7, 12, 22		
Yellow-bellied flycatcher													tv	rare				tv	rare	May 24	May 30	Aug.
Green-crested flycatcher														rare	3 May '05			sr	unc, local			
Alder flycatcher								sr	unc				tv	unc				tv	unc			
Least flycatcher	sr				sr			sr					sr	fc	May 5		yes	sr	c	May 6, 11, 14		
Skylark																						
Horned lark																		tv, wv	ab, c		Apr.	Oct., Nov. 1
Hoyt horned lark																		tv	rare	Feb. 23	Mar. 7	
Prairie horned lark	sr				sr			sr	c			yes		c			yes	tv	unc			
Blue jay	res				res			res					res	c			yes	res	c			
Canada jay																						1836
Northern raven																		av				
American crow	res	c		yes	res		yes	res	ab			yes	res	ab			yes	res	ab			
Fish crow																		sr	rare	Mar. 10, Apr. 20		
Starling																		res	local			
Bobolink	sr	c		yes	sr	c	yes	sr	c			yes	sr	c			yes	sr, tv	c, local; ab.	May 1		
Cowbird	sr	c		yes	sr	c	yes	sr	c	Mar. 25		yes	sr	c			yes	sr, res	c, oc	Mar. 10, 24, Apr. 19		
Yellow-headed blackbird																						
Red-winged blackbird	sr	c		yes	sr	ab	yes	sr	ab	Mar. 5, 17		yes	sr	ab	Mar.		yes	sr	ab	Feb. 19, Mar. 12, 14		
Meadowlark	sr	c		yes	sr, res	c, oc	yes	sr, res	c, oc			yes	sr	c	Mar. 22		yes	sr, res	c, fc	Feb. 5, 11, Mar. 18		
Orchard oriole													sr	rare				sr	fc	May 1, 6, 10		
Baltimore oriole	sr	c	May 3, 8	yes	sr	c	yes	sr	c			yes	sr	c	May 3, 4		yes	sr	c	Apr. 29, May 3, 10		
Bullock oriole																						
Rusty blackbird	tv				tv	c, fall		tv	c, fall		Oct. 25, Nov. 10		tv	c, Oct. 25	Apr. 1	May 9		tv	c	Mar. 21, Apr. 9, 12	May 8, 22	Oct. 7, 17, 22
Purple grackle																		sr, wv	ab, rare	Feb. 18, Mar. 7, Apr. 6		
Bronzed grackle	sr	c	Mar 30	yes	sr	c, Mar	yes	sr, tv	c ab	Mar. 1, 17	Oct. 20, Nov. 5	yes	sr, res	c, oc	Mar		yes	tv	oc	Mar. 13, 29		
Evening grosbeak								wv	once				wv	once		Feb. '90					Feb. 11	Nov. 28, Dec. 22
Pine grosbeak					wv	oc		wv	oc				wv	oc, 1878, '79				wv	rare			
House sparrow	res	ab		yes	res	ab	yes	res	ab			yes	res	ab			yes	res	ab			
Chaffinch																						
Greenfinch																						
Purple finch	sr				sr	ab	yes	sr		Apr.		yes	sr	fc	Mar. 31, Apr. 11		yes	sr, wv	fc, unc	Mar. 13, Apr. 11, 26		
American crossbill	wv	oc			wv	oc		wv	oc				wv	oc				wv, res	oc, rare		Apr. 5, 23, June 3	Nov. 20, Dec. 18
White-winged crossbill													wv	oc				wv	rare, ab, 1899		Jan. 18, Feb. 20	Nov. 7, 20
Hoary redpoll													wv	oc								
Redpoll	wv	oc			wv	oc		wv	oc									wv	fc, irreg		Mar. 19, 25, 31	Nov. 24, Dec. 10
Holboell redpoll																						
Greater redpoll																		wv	oc			
European linnet																						
American goldfinch	sr	c		yes	sr, res	c, oc	yes	sr, res	ab, oc			yes	sr, res	ab, oc			yes	res, sr	c, ab	Feb. 4, 22, Mar. 26		
Pine siskin																		wv, tv	fc, irreg; ab		May 3, 15	Oct. 4, 12
European goldfinch																						
Snowflake	wv												wv					wv	c		Mar. 6, 12, 24	Oct. 23, Nov. 1, 24
Lapland longspur					wv			wv	c									wv	rare		Feb. 7, 28, Apr. 18	Oct. 18, Nov. 26, Dec. 28
Chestnut-collared longspur																		av				14 Sept. '91
Vesper sparrow	sr	c		yes	sr	c	yes	sr	ab			yes	sr	c			yes	sr, res	ab, oc	Mar 25, Apr. 5, 13		
Ipswich sparrow																		wv	rare, spring; c, local		Mar. 19, 25, Apr. 10	Oct. 12, 19, 23
Savanna sparrow	sr	fc		yes	sr	fc	yes	sr	fc			yes	sr	fc	Mar. 28		yes	sr, res	c, fc	Mar 20, Apr. 2, 10		
Baird sparrow																		av	once			13 Nov. '09
Grasshopper sparrow													sr	c			yes	sr	fc	May 6, 9, 12		
Henslow sparrow																						
Leconte sparrow																						
Sharp-tailed sparrow																		sr, res	c, oc	Apr. 18, 29		
Nelson sparrow																						
Acadian sharp-tailed sparrow																		tv				
Seaside sparrow																		sr	ab	Apr. 22, May 2, 13		July 28, Aug. 20
Lark sparrow																		av				Sept. 26, Oct. 10
White-crowned sparrow	tv												tv		Apr. 28, May 7			tv	unc	Apr. 25, May 9		
Gambel sparrow					tv			tv														
White-throated sparrow	tv												tv, sr	c, rare	Apr. 23, 30		yes	tv, wv	ab, fc	Feb. 24, Mar. 5, Apr. 18	May 5, 9, 20	Sept. 29, Oct. 11, 14
Tree sparrow	wv	c			tv			tv	c				wv					wv	ab		Apr. 3, 10, 22	Oct. 9, 16, Nov. 2
Chipping sparrow	sr	c		yes	wv	c		wv	c				sr	c	Mar. 30, Apr. 5, 12		yes	sr	ab	Feb. 17, Mar. 30, Apr. 22		
Field sparrow	sr	c		yes	sr	c	yes	sr	c			yes	sr	c	Mar. 31, Apr. 12		yes	sr, res	c, oc	Feb. 6, Mar. 20, Apr. 17		
Slate-colored junco	tv	c			sr	c	yes	sr	c			yes	tv, res	ab, oc				tv, wv	ab, c	Mar	Apr. 4, 20, May 10	Sept. 14, 20, Oct. 18
Carolina junco					tv	ab		tv	ab													
Song sparrow	sr	ab		yes	sr, res	ab, oc	yes	sr, res	ab, oc			yes	sr	ab	Mar 16		yes	sr, res	ab, fc	Feb. 3, 22, Mar. 15		
Lincoln sparrow																		tv	unc	May 9	May 19, June 3	Sept. 17, 28
Swamp sparrow	sr												sr		Mar. 30, Apr. 14		yes	sr, res	fc, oc	Mar. 31, Apr. 12, 15		
Fox sparrow					sr	c	yes	sr	ab			yes	tv					tv, wv	ab, unc	Feb. 22, Mar. 13, 22	Apr. 12, 30	Oct. 12, 22, 24
Towhee					tv		yes	tv	fc				sr	c	Apr. 5, 28		yes	sr	c	Apr. 16, May 5, 12		
Cardinal					sr			sr					av					res	rare			

SPECIES RECORDED	SUFFOLK (*continued*)		SULLIVAN			TIOGA			
	Departs for south	Breeds	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Arrives from south	
Barred owl		yes	res			res	rare		
Great gray owl									
Richardson owl									
Saw-whet owl		yes				wv	oc		
Screech owl		Mar. 27, Apr. 15	res	c	yes	res	fc		ye
Great horned owl		Feb. 17, Mar. 9, Apr. 3	res			res	unc		
Snowy owl						wv	oc		
American hawk owl									
Burrowing owl									
Carolina paroquet									
Yellow-billed cuckoo	Sept. 13, 18	June 9, 15, Aug. 24	sr			sr	fc		ye
Black-billed cuckoo	Sept. 23, 29, Oct. 11	May 26, 30	sr			sr	fc		ye
Belted kingfisher	Sept. 30, Oct. 4, Nov. 13	Apr. 15, May 7, 12	sr	c	yes	sr	fc		ye
Hairy woodpecker		May 30	res			res	unc		ye
Downy woodpecker		May 5	res	c	yes	res	fc		ye
Arctic three-toed woodpecker						res	? local		? y
Am. three-toed woodpecker									
Yellow-bellied sapsucker	Oct. 15, 21, Dec. 2		tv			tv	unc		
North. pileated woodpecker						res	rare		
Red-headed woodpecker	Oct. 1, 17	yes				sr	rare		ye
Red-bellied woodpecker									
Northern flicker	Oct. 4, 16, Nov. 12	Apr. 18, May 25, June 1	sr	c	yes	sr	c	Apr. 12	ye
Whip-poor-will	Sept. 21, Oct. 6	May 30	sr			sr	local		
Nighthawk	Sept. 14, Oct. 15, Nov. 3	yes	sr, tv		yes	sr	c		ye
Chimney swift	Oct. 11	June 20, 29	sr	c	yes	sr	c	Apr. 20	ye
Ruby-throated hummingbird	Sept. 10, 17, Oct. 15	June 8, 14	sr	c	yes	sr	c	May 18	ye
Kingbird	Aug. 29, Sept. 5	May 26, June 10, 16	sr	c	yes	sr	c		ye
Gray kingbird									
Arkansas kingbird									
Crested flycatcher	Sept. 26	June 1, 5, July 6	sr			sr	fc		
Phoebe	Sept. 1, 15, Oct. 20	Apr. 25, May 5	sr	c	yes	sr	c	Apr. 12	ye
Olive-sided flycatcher	Sept					tv	rare		
Wood pewee	Sept. 4, 23, Oct. 19	June 16, 27	sr	c	yes	sr	c		ye
Yellow-bellied flycatcher	Sept								
Green-crested flycatcher		June 17							
Alder flycatcher						sr	unc		
Least flycatcher	Sept	June 3, 17	sr			sr	c		ye
Skylark									
Horned lark									
Hoyt horned lark									
Prairie horned lark						tv, sr	c, fc		ye
Blue jay		May 19	res			res	fc		ye
Canada jay									
Northern raven									
American crow		Apr. 16, 24, May 23	res	c	yes	res	ab		ye
Fish crow		yes							
Starling									
Bobolink	Sept. 18, 30	May	sr	c	yes	sr	c		ye
Cowbird	Nov. 7	yes	sr	c	yes	sr	c		ye
Yellow headed blackbird									
Red-winged blackbird	Nov. 15, Dec. 25	May 16, 30, June 4	sr	c	yes	sr, res	c, rare		ye
Meadowlark	Dec. 19	May 7, 20, June 19	sr	c	yes	sr, res	c, oc		ye
Orchard oriole	Sept	May 21, June 3, 22				sr	oc	May 1, 12	ye
Baltimore oriole	Sept. 7	May 28, 30	sr	c	yes	sr	c	May 1, 7	ye
Bullock oriole									
Rusty blackbird	Nov. 11, 20, Dec. 4		tv			tv	fc		
Purple grackle	Oct. 24, Nov. 5, 16	Apr. 3							
Bronzed grackle			sr			sr	c	Mar	ye
Evening grosbeak						wv	rare	4 Jan., 4 Mar. '90	
Pine grosbeak						wv	oc		
House sparrow		yes	res	ab	yes	res	ab		ye
Chaffinch									
Greenfinch									
Purple finch	Oct. 26, Nov. 26	May 15	sr			tv, sr	c, oc		ye
American crossbill		10 Apr. '83	wv			wv	oc		
White-winged crossbill						wv	rare		
Hoary redpoll									
Redpoll			wv			wv	fc, c, 1889		
Holboell redpoll									
Greater redpoll									
European linnet									
American goldfinch	Oct. 9, Nov. 3, Dec. 29	Aug. 27	sr	c	yes	sr	c		ye
Pine siskin			tv	Oct. '82		wv	rare		
European goldfinch									
Snowflake			wv			wv	c	Mar. 3	
Lapland longspur									
Chestnut-collared longspur									
Vesper sparrow	Oct. 29, Nov. 5, 12	May 8, July 20	sr	c	yes	sr	c		ye
Ipswich sparrow									
Savanna sparrow	Oct. 14, 22, Nov. 15	yes	sr			sr			
Baird sparrow									
Grasshopper sparrow	Sept. 22, Oct. 25	May 29, June 5				sr			
Henslow sparrow	20 Nov. '01	?							
Leconte sparrow									
Sharp-tailed sparrow	Oct. 11, 17, Nov. 2	May 26, June 1, 27							
Nelson sparrow									
Acadian sharp-tailed sparrow									
Seaside sparrow	Sept. 21, Oct. 1, 17	May 23, 30, June 14							
Lark sparrow	Nov. 27								
White-crowned sparrow	Oct. 10, 24, Nov. 17		tv			tv	unc		
Gambel sparrow									
White-throated sparrow	Nov. 23		tv	c		tv	c	Mar. 18, 30	
Tree sparrow			wv			wv	c		
Chipping sparrow	Oct. 9, 26, Nov. 8	May 2, 20, July 23	sr	c	yes	sr	ab	Apr. 6	ye
Field sparrow	Oct. 20, Nov. 12, Dec. 21	May 14, June 22	sr	c	yes	sr	ab	Mar. 4, 30	ye
Slate-colored junco			tv	c		tv	c	Apr. 10	
Carolina junco									
Song sparrow	Nov. 5, 26, Dec. 19	Apr. 28, May 12, July 27	sr	c	yes	sr	c	Mar. 20, Oct. 30	ye
Lincoln sparrow	Oct. 8, 11, 16								
Swamp sparrow	Oct. 11, 20	June 4							
Fox sparrow	Nov. 8, 22, Dec. 29		tv			tv	rare		
Towhee	Oct. 22, Nov. 4, 20	May 16, 29, June 20	sr			sr	c		ye
Cardinal		May 1, 15, June 8							

	TOMPKINS						ULSTER		
ident or nsient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Breeds
	unc						res		
	fc					yes	res	c	yes
	unc					Mar. 5, 10	res		
	oc						wv	oc	
	fc	May 8, 12				yes	sr		
	c	May 6, 8				May 26, June 15	sr		
	c	Mar. 29, Apr. 3, 11				yes	sr		
	fc					yes	res		
	c					yes	res		
	once						res (?)	rare	
	c, rare	Mar. 31, Apr. 13, 16	May 5, 14				tv		
	c, oc	May 3, 7				yes	sr		
	rare								
	c	Apr. 2, 23				yes	sr	c	yes
	unc	May 1, 4				yes	sr	c	yes
	c	May 12, 22				yes	sr	fc	yes
	ab	Apr. 21, 22, 25				yes	sr	c	yes
	c	May 5, 7, 9				yes	sr	c	yes
	c	May 3, 6, 9				yes	sr	c	yes
	c	May 2, 4, 8				yes	sr	fc	yes
	c	May 19, 22, 26				yes	sr	c	yes
	unc	May 11					tv, sr	local	June 16
	c	May 3, 10, 17				yes	sr	c	yes
	fc	May 17	June 1, 9				tv, sr	local	June 26
	rare	June 4							
	unc	May 7, 22				yes	tv, sr	fc, local	June 20
	c	Apr. 30, May 3, 6				yes	sr	c	yes
	c, oc	Jan. 21, Feb. 7, 25			Nov. 19	May 7			
	fc					yes	res		yes
	ab					Apr. 16, May 4	res	c	yes
							sr	local	yes
							res	local	yes
	c	May 1, 3, 9				yes	sr		yes
	c	Mar. 18, 30				Apr. 26, May 25	sr	c	yes
	ab, oc	Feb. 24, Mar. 13, 14				yes	sr	c	yes
	c, oc	Mar. 14, 18				yes	sr	fc	yes
	rare						sr	c	yes
	c	Apr. 30, May 4, 5				yes	sr	c	yes
	c	Apr. 10, 18					tv	fc	
	c	Mar. 12, 13				yes	sr		yes
	rare		11 Apr. '04	11 Dec. '89, 8 Dec. '06					
	unc		Apr. 20, May 5				wv	oc, 25 Nov. '75	
	ab					yes	res	ab	yes
wr	c, fc oc	Mar. 18, 27, Apr. 12				yes	sr	c	yes
	fc		Apr. 19, June 14, 24				wv, res	oc, rare	yes
	rare		11 Jan. '07						
	fc, irreg		Mar. 24	1889; c, 1904			wv	oc	
	c, oc					yes	res	c	yes
	oc	May 10	May 30				wv	oc	
	c		Mar. 9	Oct. 29			wv	irreg	
	ab	Mar. 23, 26, Apr. 6				yes	sr	c	yes
	c	Mar. 23, 26				yes	tv, sr	c, oc	
	c	Apr. 26, May 5, 8				May 25, June 12	sr		yes
	once			11 Oct. '97					
				Sept. 28	Oct. 1				
				1, 11 Oct. '97	Oct. 12				
	fc	May 3, 11	May 10, 18				tv		
	once	30 Apr. '98							
	c	Apr. 15, 19, 30	May 14, 22				tv, sr	c, local	
	c		Apr. 23, 27	Sept. 21, Oct.			wv	c	
	ab	Mar. 29, 31, Apr. 12				yes	sr	c	yes
	c	Mar. 27, 30, Apr. 6				yes	sr	c	yes
sr	ab, fc, local		May 12	Sept. 11, 25			tv, sr	c, unc	yes
	ab, oc	Mar. 1, 16, 28				yes	sr	c	yes
	unc	May 7, 12	May 14	Oct. 6					
	fc, unc	Mar. 29, Apr. 2, 18			Oct. 30	yes	sr		yes
	fc	Mar. 26, Apr. 5	Apr. 20, 30				tv		
	fc	Apr. 15, 18, 30				yes	sr		yes

SPECIES RECORDED	SUFFOLK (*continued*)		SULLIVAN			TIOGA			
	Departs for south	Breeds	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Arrives from south	Breeds
Barred owl		yes	res			res	rare		
Great gray owl									
Richardson owl						wv	oc		
Saw-whet owl		yes							
Screech owl		Mar. 27, Apr. 15	res	c	yes	res	fc		yes
Great horned owl		Feb. 17, Mar. 9, Apr. 3	res			res	unc		
Snowy owl						wv	oc		
American hawk owl									
Burrowing owl									
Carolina paroquet									
Yellow-billed cuckoo	Sept. 13, 18	June 9, 15, Aug. 24	sr			sr	fc		yes
Black-billed cuckoo	Sept. 23, 30, Oct. 11	May 26, 30	sr			sr	fc		yes
Belted kingfisher	Sept. 30, Oct. 4, Nov. 13	Apr. 15, May 7, 12	sr	c	yes	sr	fc		yes
Hairy woodpecker		May 30	res			res	unc		yes
Downy woodpecker		May 5	res	c	yes	res	fc		yes
Arctic three-toed woodpecker						res	? local		? yes
Am. three-toed woodpecker									
Yellow-bellied sapsucker	Oct. 15, 21, Dec. 2		tv			tv	unc		
North. pileated woodpecker						res	rare		
Red-headed woodpecker	Oct. 1, 17	yes				sr	rare		yes
Red-bellied woodpecker							rare		
Northern flicker	Oct. 4, 16, Nov. 12	Apr. 18, May 25, June 1	sr	c	yes	sr	c	Apr. 12	yes
Whip-poor-will	Sept. 21, Oct. 6	May 30	sr			sr	local		
Nighthawk	Sept. 14, Oct. 15, Nov. 3	yes	sr, tv		yes	sr	c		yes
Chimney swift	Oct. 11	June 20, 29	sr	c	yes	sr	c	Apr. 20	yes
Ruby-throated hummingbird	Sept. 10, 17, Oct. 15	June 8, 14	sr	c	yes	sr	c	May 18	yes
Kingbird	Aug. 29, Sept. 5	May 26, June 10, 16	sr	c	yes	sr	c		yes
Gray kingbird									
Arkansas kingbird									
Crested flycatcher	Sept. 26	June 1, 5, July 0	sr			sr	fc		
Phoebe	Sept. 1, 15, Oct. 20	Apr. 25, May 5	sr	c	yes	sr	c	Apr. 12	yes
Olive-sided flycatcher	Sept					tv	rare		
Wood pewee	Sept. 4, 23, Oct. 19	June 16, 27	sr	c	yes	sr	c		yes
Yellow-bellied flycatcher	Sept								
Green-crested flycatcher		June 17							
Alder flycatcher						sr	unc		
Least flycatcher	Sept	June 3, 17	sr			sr	c		yes
Skylark									
Horned lark									
Hoyt horned lark									
Prairie horned lark						tv, sr	c, fc		yes
Blue jay		May 19	res			res	fc		yes
Canada jay									
Northern raven									
American crow		Apr. 16, 24, May 23	res	c	yes	res	ab		yes
Fish crow		yes							
Starling									
Bobolink	Sept. 18, 30	May	sr	c	yes	sr	c		yes
Cowbird	Nov. 7	yes	sr	c	yes	sr	c		yes
Yellow headed blackbird									
Red-winged blackbird	Nov. 15, Dec. 25	May 16, 30, June 4	sr	c	yes	sr, res	c, rare		yes
Meadowlark	Dec. 19	May 7, 20, June 19	sr	c	yes	sr, res	c, oc		yes
Orchard oriole	Sept	May 21, June 3, 22				sr	oc	May 1, 12	yes
Baltimore oriole	Sept. 7	May 28, 30	sr	c	yes	sr	c	May 1, 7	yes
Bullock oriole									
Rusty blackbird	Nov. 11, 20, Dec. 4		tv						
Purple grackle	Oct. 24, Nov. 5, 16	Apr. 3				tv	fc		
Bronzed grackle			sr						
Evening grosbeak						sr	c	Mar.	yes
Pine grosbeak						wv	rare	4 Jan., 4 Mar. '90	
House sparrow		yes	res	ab	yes	wv	oc		
Chaffinch						res	ab		yes
Greenfinch									
Purple finch	Oct. 26, Nov. 26	May 15	sr						
American crossbill		10 Apr. '83	wv			tv, sr	c, oc		yes
White-winged crossbill						wv	oc		
Hoary redpoll						wv	rare		
Redpoll									
Holboell redpoll			wv			wv	fc, c, 1889		
Greater redpoll									
European linnet									
American goldfinch	Oct. 9, Nov. 3, Dec. 29	Aug. 27	sr						
Pine siskin				c	yes	sr	c		yes
European goldfinch			tv	Oct. '82		wv	rare		
Snowflake									
Lapland longspur			wv			wv	c	Mar. 3	
Chestnut-collared longspur									
Vesper sparrow	Oct. 29, Nov. 5, 12	May 8, July 20	sr						
Ipswich sparrow				c	yes	sr	c		yes
Savanna sparrow	Oct. 14, 22, Nov. 15	yes	sr						
Baird sparrow						sr			
Grasshopper sparrow	Sept. 22, Oct. 25	May 29, June 5							
Henslow sparrow	20 Nov. '01	?				sr			
Leconte sparrow									
Sharp-tailed sparrow	Oct. 11, 17, Nov. 2	May 26, June 1, 27							
Nelson sparrow									
Acadian sharp-tailed sparrow									
Seaside sparrow	Sept. 21, Oct. 1, 17	May 23, 30, June 14							
Lark sparrow	Nov. 27								
White-crowned sparrow	Oct. 10, 24, Nov. 17								
Gambel sparrow			tv						
White-throated sparrow	Nov. 23					tv	unc		
Tree sparrow			tv						
Chipping sparrow	Oct. 9, 26, Nov. 8	May 2, 20, July 23	wv	c		tv	c	Mar. 18, 30	
Field sparrow	Oct. 20, Nov. 12, Dec. 21	May 14, June 22	sr	c	yes	wv	c		
Slate-colored junco			sr	c	yes	sr	ab	Apr. 6	yes
Carolina junco			tv	c		sr	ab	Mar. 4, 30	yes
Song sparrow	Nov. 5, 26, Dec. 19	Apr. 28, May 12, July 27	sr	c		tv	c	Apr. 10	
Lincoln sparrow	Oct. 8, 11, 16				yes	sr	c	Mar. 20, Oct. 30	yes
Swamp sparrow	Oct. 13, 20	June 4							
Fox sparrow	Nov. 8, 22, Dec. 29								
Towhee	Oct. 22, Nov. 4, 20	May 16, 29, June 20	tv						
Cardinal		May 1, 15, June 8	sr			tv	rare		
						sr	c		yes

SPECIES RECORDED	TOMPKINS							ULSTER		
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Breeds
Barred owl	res	unc						res		
Great gray owl										
Richardson owl										
Saw-whet owl	res	fc					yes	res	c	yes
Screech owl	res	unc					Mar. 5, 10	res		
Great horned owl	wv	oc						wv	oc	
Snowy owl										
American hawk owl										
Burrowing owl										
Carolina paroquet										
Yellow-billed cuckoo	sr	fc	May 8, 12				yes	sr		
Black-billed cuckoo	sr	c	May 6, 8				May 26, June 15	sr		
Belted kingfisher	sr	c	Mar. 29, Apr. 3, 11				yes	sr		
Hairy woodpecker	res	fc					yes	res		
Downy woodpecker	res	c					yes	res		
Arctic three-toed woodpecker	av	once						res (?)	rare	
Am. three-toed woodpecker								tv		
Yellow-bellied sapsucker	tv, wv	c, rare	Mar. 31, Apr. 13, 16	May 5, 14						
North. pileated woodpecker										
Red-headed woodpecker	sr, res	c, oc	May 3, 7				yes	sr		
Red-bellied woodpecker		rare								
Northern flicker	sr	c	Apr. 2, 23				yes	sr	c	yes
Whip-poor-will	sr	unc	May 1, 4				yes	sr	c	yes
Nighthawk	sr	c	May 12, 22				yes	sr	fc	yes
Chimney swift	sr	ab	Apr. 21, 22, 25				yes	sr	c	yes
Ruby-throated hummingbird	sr	c	May 5, 7, 9				yes	sr	c	yes
Kingbird	sr	c	May 3, 6, 9				yes	sr	c	yes
Gray kingbird										
Arkansas kingbird							yes	sr	fc	yes
Crested flycatcher	sr	c	May 2, 4, 8				yes	sr	c	yes
Phoebe	sr	c	May 19, 22, 26					tv, sr	local	June 16
Olive-sided flycatcher	tv	unc	May 11				yes	sr	c	yes
Wood pewee	sr	c	May 3, 10, 17					tv, sr	local	June 26
Yellow-bellied flycatcher	tv	fc	May 17	June 1, 9						
Green-crested flycatcher	sr	rare	June 4				yes	tv, sr	fc, local	June 20
Alder flycatcher	tv, sr	unc	May 7, 22				yes	sr	c	yes
Least flycatcher	sr	c	Apr. 30, May 3, 6							
Skylark										
Horned lark										
Hoyt horned lark						Nov. 19	May 7			
Prairie horned lark	sr, wv	c, oc	Jan. 21, Feb. 7, 25				yes	res		yes
Blue jay	res	fc								
Canada jay										
Northern raven							Apr. 16, May 4	res	c	yes
American crow	res	ab						sr	local	yes
Fish crow								res	local	yes
Starling							yes	sr		yes
Bobolink	sr	c	May 1, 3, 9				Apr. 26, May 25	sr	c	yes
Cowbird	sr	c	Mar. 18, 30							
Yellow headed blackbird							yes	sr	c	yes
Red-winged blackbird	sr, wv	ab, oc	Feb. 24, Mar. 13, 14				yes	sr	fc	yes
Meadowlark	sr, res	c, oc	Mar. 14, 18					sr	c	yes
Orchard oriole	sr	rare					yes	sr	c	yes
Baltimore oriole	sr	c	Apr. 30, May 4, 5							
Bullock oriole								tv	fc	
Rusty blackbird	tv	c	Apr. 10, 18							
Purple grackle							yes	sr		yes
Bronzed grackle	sr	c	Mar. 12, 13							
Evening grosbeak	wv	rare		11 Apr. '04	11 Dec. '89, 8 Dec. '06			wv	oc, 25 Nov. '75	
Pine grosbeak	wv	unc		Apr. 20, May 5					ab	yes
House sparrow	res	ab					yes	res		
Chaffinch										
Greenfinch							yes	sr	c	yes
Purple finch	tv, sr, wv	c, fc oc	Mar. 18, 27, Apr. 12					wv, res	oc, rare	yes
American crossbill	wv	fc		Apr. 19, June 14, 24						
White-winged crossbill	wv	rare		11 Jan. '07						
Hoary redpoll								wv	oc	
Redpoll	wv	fc, irreg		Mar. 24	1889; c, 1904					
Holboell redpoll										
Greater redpoll										
European linnet							yes	res	c	yes
American goldfinch	sr, res	c, oc						wv	oc	
Pine siskin	wv	oc	May 10	May 30						
European goldfinch								wv	irreg	
Snowflake	wv	c		Mar. 9	Oct. 29					
Lapland longspur										
Chestnut-collared longspur							yes	sr	c	yes
Vesper sparrow	sr	ab	Mar. 23, 26, Apr. 6							
Ipswich sparrow							yes	tv, sr	c, oc	
Savanna sparrow	sr	c	Mar. 23, 26							
Baird sparrow							May 25, June 12	sr		yes
Grasshopper sparrow	sr	c	Apr. 26, May 5, 8							
Henslow sparrow										
Leconte sparrow					11 Oct. '97					
Sharp-tailed sparrow	av	once								
Nelson sparrow					Sept. 28	Oct. 1				
Acadian sharp-tailed sparrow	tv				1, 11 Oct. '97	Oct. 12				
Seaside sparrow	tv									
Lark sparrow								tv		
White-crowned sparrow	tv	fc	May 3, 11	May 10, 18						
Gambel sparrow								tv, sr	c, local	
White-throated sparrow	av	once	30 Apr. '08					wv		
Tree sparrow	tv	c	Apr. 15, 19, 30	May 14, 22				sr	c	yes
Chipping sparrow	wv	c		Apr. 23, 27	Sept. 21, Oct.			sr	c	yes
Field sparrow	sr	ab	Mar. 29, 31, Apr. 12				yes	sr	c	yes
Slate-colored junco	sr	c	Mar. 27, 30, Apr. 6					tv, sr	c, unc	yes
Carolina junco	tv, wv, sr	ab, fc, local		May 12	Sept. 11, 25					
Song sparrow							yes	sr	c	yes
Lincoln sparrow	sr, res	ab, oc	Mar. 1, 16, 28							
Swamp sparrow	tv	unc	May 7, 12	May 14	Oct. 6	Oct. 30	yes	sr		yes
Fox sparrow	sr, wv	fc, unc	Mar. 29, Apr. 2, 18					tv		
Towhee	tv	fc	Mar. 26, Apr. 5	Apr. 20, 30			yes	sr		yes
Cardinal	sr	fc	Apr. 15, 18, 30							

SPECIES RECORDED	WARREN					WASHINGTON						
	Resident or transient	Common or rare	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	B
Barred owl	res				yes	res	c					yes
Great gray owl						av						
Richardson owl												
Saw-whet owl	res	fc			yes	res	fc					yes
Screech owl	res	c			yes	res	c					May 1
Great horned owl	res	fc			yes	res	c					Feb. 2
Snowy owl	wv					wv	oc					
American hawk owl						wv	rare					
Burrowing owl												
Carolina paroquet												
Yellow-billed cuckoo	sr	c			yes	sr	c	May 14			Sept. 21	June
Black-billed cuckoo	sr	fc			yes	sr	c	May 10				June
Belted kingfisher	sr	c			yes	sr	c	Mar. 30			Oct.	May 1
Hairy woodpecker	res	c			yes	res	c					May 3
Downy woodpecker	res	c			yes	res	ab					May 1
Arctic three-toed woodpecker	res					wv	rare					
Am. three-toed woodpecker	res	unc	13 Oct. '83	11 Jan. '89	?	wv	rare					
Yellow-bellied sapsucker	sr				yes	sr	fc	Apr. 28			Nov.	May 1
North. pileated woodpecker	res	fc				res	rare					
Red-headed woodpecker	sr					sr, res	unc, oc					
Red-bellied woodpecker												
Northern flicker	sr	ab			yes	sr	ab					May 1
Whip-poor-will	sr	fc			yes	sr	fc	Apr. 27				yes
Nighthawk	sr	oc			yes	sr	unc	May 20				yes
Chimney swift	sr	ab			yes	sr	ab	May 1				June 1
Ruby-throated hummingbird	sr	c			yes	sr	c	May 11			Sept. 10	June 6
Kingbird	sr	ab			yes	sr	ab	May 6, 12			Sept. 5	May 3
Gray kingbird												
Arkansas kingbird												
Crested flycatcher	sr	fc			yes	sr	fc	May 7				June 1
Phoebe	sr	c			yes	sr	c	Mar. 31, Apr. 4			Oct.	May 1
Olive-sided flycatcher	sr, tv	unc, c			yes	sr	rare	May 13				June 1
Wood pewee	sr	c			yes	sr	c	May 12			Sept. 2	June 8
Yellow-bellied flycatcher	sr	unc				sr	unc					
Green-crested flycatcher												
Alder flycatcher	sr	unc				sr	rare					
Least flycatcher	sr	c			yes	sr	fc	May 7				May 2
Skylark												
Horned lark	wv	c										
Hoyt horned lark												
Prairie horned lark	sr				yes	sr	rare					yes
Blue jay	res	c			yes	res	c					May 1,
Canada jay	wv	once, Nov. 14										
Northern raven	wv	rare	29 Oct. '97			tv	rare, fall					
American crow	res	c			yes	res	ab					yes
Fish crow												
Starling												
Bobolink	sr	c, local			yes	sr	c	May 1			Sept. 6	May 25
Cowbird	sr	c			yes	sr	c					yes
Yellow-headed blackbird												
Red-winged blackbird	sr	c			yes	sr	ab	Mar. 20				May 8,
Meadowlark	sr	fc			yes	sr	fc	Mar.			Nov.	May 16
Orchard oriole						sr	rare					3 June
Baltimore oriole	sr	c			yes	sr	ab	May 6			Aug. 31	June 1
Bullock oriole												
Rusty blackbird	tv	c				tv	fc					
Purple grackle												
Bronzed grackle	sr	c, local			yes	sr	c	Apr. 4				May 12
Evening grosbeak	wv											
Pine grosbeak	wv	c				wv	oc					
House sparrow	res				yes	res	ab					yes
Chaffinch												
Greenfinch												
Purple finch	sr	c			yes	sr	ab	Mar. 20				yes
American crossbill	wv	c				wv	irreg					
White-winged crossbill	wv	irreg, c				wv	rare					
Hoary redpoll												
Redpoll	wv	c				wv	c				Nov. 10	
Holboell redpoll	wv	once, 27 Jan. '90										
Greater redpoll	wv	twice, Jan. 2, 11										
European linnet												
American goldfinch	sr	c			yes	sr	ab					July
Pine siskin	wv	oc				wv	oc					
European goldfinch												
Snowflake	wv	c				wv	c		Mar. 17	Nov		
Lapland longspur												
Chestnut-collared longspur												
Vesper sparrow	sr	c			yes	sr	ab	Apr. 5			Nov. 5	May 5
Ipswich sparrow												
Savanna sparrow	sr	fc				sr	unc					May 8
Baird sparrow												
Grasshopper sparrow						sr	c	Apr. 30				May 1
Henslow sparrow												
Leconte sparrow												
Sharp-tailed sparrow												
Nelson sparrow												
Acadian sharp-tailed sparrow												
Seaside sparrow												
Lark sparrow												
White-crowned sparrow	tv	fc				tv	fc					
Gambel sparrow												
White-throated sparrow	tv, sr	c, oc				tv, sr	c, fc					May 2
Tree sparrow	wv	c				wv	c					
Chipping sparrow	sr	c			yes	sr	ab	Apr. 18			Oct.	May 2
Field sparrow	sr	fc			yes	sr	c	Apr. 15, 20			Oct. 15	May 1
Slate-colored junco	tv, sr	ab, fc			yes	tv, sr	ab, fc					May 1
Carolina junco												
Song sparrow	sr	ab			yes	sr	ab	Mar. 15			Oct. 22	May 5
Lincoln sparrow												
Swamp sparrow	sr	unc			yes	sr	unc	Apr. 21				May 7
Fox sparrow	tv					tv	c	Mar. 23	Apr. 15	Oct. 5	Nov. 13	
Towhee	sr	c		Sept. 23	yes	sr	ab	May 1, 10				May 2
Cardinal												

WAYNE				WESTCHESTER						
dent or sient	Common or rare	Arrives from south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds
	unc		yes	res	rare					
				wv	unc					
	c		yes	res	c					yes
				res	unc					Feb. 26
				wv	oc					
	fc	May 10, 14	yes	sr	c	May 4, 9			Oct. 31	yes
	c	May 4	yes	sr	c	May 3			Oct. 7	yes
	c		yes	sr, res	c, oc	Apr. 1, 7			Nov. 23	yes
	fc		yes	res	unc					yes
	c		yes	res	c					yes
	c			tv, wv	c, oc	Apr. 5	May 13	Sept. 18	Oct. 23	
				tv, res	fc, oc			Aug. 27	Oct. 12, Nov	yes
	c		yes	sr, res	c, oc	Mar. 25			Oct. 30	yes
	local		yes	sr	fc	Apr. 19, 30			Oct. 17	yes
	c, oc			sr	fc	May 9			Oct. 11	yes
	c	Apr. 30, May 2	yes	sr	ab	Apr. 19, 21			Oct. 23	yes
	fc	May 11	yes	sr	c	Apr. 30, May 2, 6			Oct. 3	yes
	c	May 8, 12	yes	sr	c	Apr. 29, May 2, 5			Sept. 10	yes
	fc			sr	c	May 7			Sept. 12	yes
	c	Apr	yes	sr	c	Mar. 14, 24			Oct. 29	yes
				tv	unc	May 20		Aug. 15, 18	Sept. 16	
	c		yes	sr	c	May 10, 16			Oct. 2	yes
				tv	fc	May 17	June 4	Aug. 8	Sept. 20	
				sr	c	May 10, 22			Aug. 27	June 5, 12, 16
				tv	fc	May 19, 21	May 31		Aug. 29, Sept. 11	
	fc	May 8	yes	sr	c	Apr. 25, 30, May 5			Aug. 26	yes
				wv	irreg					
			yes							
	fc, oc			res	fc					yes
	1875									
	c		yes	res	ab					yes
				sr, res	fc, oc	Mar. 1				May 15
				res	local					yes
	fc	May 10	yes	sr	ab	Apr. 30, May 2, 6			Oct. 5	yes
	c		yes	sr, res	ab, oc	Mar. 22			Nov. 11	yes
	c		yes	sr	ab	Feb. 25			Nov. 11	yes
	c	Mar. 31	yes	sr, res	fc, oc	Feb. 20, Mar. 12			Nov. 27	yes
				sr	c	May 2			Aug. 6	yes
	ab	May 4	yes	sr	ab	May 1, 6			Sept. 7, 9	yes
				tv	c	Mar. 10, 25	Apr	Oct	Nov. 27	
				sr	c	Feb. 15, Mar. 10			Nov. 8	yes
	c		yes	tv, sr	c					yes
	oc			wv	oc		Apr. 12	Dec. 18		
	ab		yes	res	ab					yes
	c		yes	tv, res	c, oc	Apr				yes
	oc			wv, res	irreg, rare		May 10, June	Oct., Nov. 3		30 Apr. '76
				wv	irreg		Jan. 10, Mar. 15, May 10	Oct. 29, Nov. 18		
	oc			wv	c, irreg		Mar. 6	Nov. 25		
				av			12, 13 Feb '83			
				av						
	c		yes	res	ab					yes
	oc			wv, res	c, irreg, rare		May 24	Dec. 24		25 May '83
				res	unc					
	c			wv	irreg		Mar. 22	Oct. 25		
				wv	rare					
	c		yes	sr, res	c, oc	Mar. 29, Apr. 4			Nov. 2	
	fc		yes	tv, sr	c, oc	Apr. 3		Aug. 28	Oct. 28	yes
				sr	c	Apr. 27			Oct. 23	yes
				tv	rare			Oct. 5, 10	Nov. 3	
				sr	local					
				tv	fc			Sept. 25, 28	Oct. 17	
				tv	rare			Sept. 29	Oct. 16	
				av						
	fc			tv	unc	May 9	May 26	Oct. 3	Oct. 30	
	c			tv, wv	c, unc	Apr. 10	May 21	Sept. 20	Oct. 20	
	c			wv	ab		Apr. 16, 27	Oct. 10		
	c	Apr. 15	yes	sr	ab	Apr. 9, 15			Nov. 9	yes
	c	Apr. 15	yes	sr	c	Mar. 7, Apr. 2			Nov. 7	yes
	ab, unc			wv	ab		May 4	Sept. 19		
	ah, oc	Mar. 12	yes	sr, res	ab, fc					yes
	unc			tv	unc	May 7	May 23	Sept. 29	Oct. 16, Nov. 3	
	fc		yes	sr, res	ab; local, oc	Apr. 4			Dec. 2	yes
	fc			tv	c	Mar. 4	Apr. 20	Oct. 14	Nov. 28	
	local		yes	sr, tv	c, ab	Apr. 21, 27			Oct. 31	yes
				res	rare					yes

SPECIES RECORDED	WARREN					WASHINGTON							WAYNE				WESTCHESTER						
	Resident or transient	Common or rare	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds
Barred owl	res				yes	res	c					yes	res	unc		yes	res	rare					
Great gray owl						av																	
Richardson owl																							
Saw-whet owl	res	fc			yes	res	fc					yes					wv	unc					
Screech owl	res	c			yes	res						May 1, 10.	res	c		yes	res	c					yes
Great horned owl	res	fc			yes	res	c					Feb. 20	res				res	unc					Feb 26
Snowy owl	wv					wv	oc						wv				wv	oc					
American hawk owl						wv	rare																
Burrowing owl																							
Carolina parquet																							
Yellow-billed cuckoo	sr	c			yes	sr	c	May 14.			Sept 21	June	sr		May 10, 14	yes	sr	c	May 4, 9			Oct 31	yes
Black-billed cuckoo	sr	fc			yes	sr	c	May 10				June	sr	c	May 4	yes	sr	c	May 3			Oct 7	yes
Belted kingfisher	sr	c			yes	sr	c	Mar 30			Oct	May 1	sr	c		yes	sr, res	c, oc	Apr. 1, 7			Nov. 23	yes
Hairy woodpecker	res	c			yes	res	c					May 3	res	fc		yes	res	unc					yes
Downy woodpecker	res	c			yes	res	ab					May 12	res	c		yes	res	c					yes
Arctic three-toed woodpecker	res					wv	rare																
Am. three-toed woodpecker	res	unc	13 Oct '83	11 Jan. '89		wv	rare																
Yellow-bellied sapsucker	sr				yes	sr	fc	Apr. 28			Nov	May 19	tv	c			tv, wv	c, oc	Apr. 5	May 13	Sept. 18	Oct. 23	
North. pileated woodpecker	res	fc				res	rare																
Red-headed woodpecker	sr					sr, res	unc, oc						sr				tv, res	fc, oc			Aug. 27	Oct. 12, Nov	yes
Red-bellied woodpecker																							
Northern flicker	sr	ab			yes	sr	ab					May 15	sr	c		yes	sr, res	c, oc	Mar 25			Oct 30	yes
Whip-poor-will	sr	fc			yes	sr	fc	Apr. 27				yes	sr	local		yes	sr	fc	Apr. 19, 30			Oct. 17	yes
Nighthawk	sr	oc			yes	sr	unc	May 30				yes	tv, sr	c, oc			sr	fc	May 9			Oct 11	yes
Chimney swift	sr	ab			yes	sr	ab	May 1				June 10	sr	c	Apr. 30, May 2	yes	sr	ab	Apr. 19, 21			Oct 23	yes
Ruby-throated hummingbird	sr	c			yes	sr	c	May 11			Sept. 10	June 6	sr	fc	May 11	yes	sr	c	Apr. 30, May 2, 6			Oct. 3	yes
Kingbird	sr	ab			yes	sr	ab	May 6, 12			Sept. 5	May 30, June 6	sr	c	May 8, 12	yes	sr	c	Apr. 29, May 2, 5			Sept. 10	yes
Gray kingbird																							
Arkansas kingbird																							
Crested flycatcher	sr	fc			yes	sr	fc	May 7				June 1	sr				sr	c	May 7			Sept 12	yes
Phoebe	sr	c			yes	sr	c	Mar. 31, Apr. 4			Oct	May 1	sr	c	Apr	yes	sr	c	Mar. 14, 24			Oct. 29	yes
Olive-sided flycatcher	sr, tv	unc, c			yes	sr	rare	May 13				June 15					tv	unc	May 20		Aug. 15, 18	Sept. 16	
Wood pewee	sr	c			yes	sr	c	May 12			Sept. 2	June 8	sr	c		yes	sr	c	May 10, 16			Oct. 2	yes
Yellow-bellied flycatcher	sr	unc				sr	unc										tv	fc	May 17	June 4	Aug. 8	Sept. 20	
Green-crested flycatcher																	sr	c	May 10, 22			Aug. 27	June 5, 12, 16
Alder flycatcher	sr	unc				sr	rare										tv	fc	May 19, 21	May 31		Aug. 29, Sept 11	
Least flycatcher	sr	c			yes	sr	fc	May 7				May 20, June 20	sr	fc	May 8	yes	sr	c	Apr. 25, 30, May 5			Aug. 26	yes
Skylark																							
Horned lark	wv	c															wv	irreg					
Hoyt horned lark																							
Prairie horned lark	sr				yes	sr	rare					yes	sr			yes							
Blue jay	res	c			yes	res	c					May 1, 10	tv, sr	fc, oc			res	fc					yes
Canada jay	wv	once, Nov. 14																					
Northern raven	wv	rare	29 Oct. '97			tv	rare, fall						av	1875									
American crow	res	c			yes	res	ab					yes	res	c		yes	res	ab					yes
Fish crow																	sr, res	fc, oc	Mar. 1				May 15
Starling																	res	local					yes
Bobolink	sr	c, local			yes	sr	c	May 1			Sept. 6	May 25	sr	fc	May 10	yes	sr	ab	Apr. 30, May 2, 6			Oct 5	yes
Cowbird	sr	c			yes	sr	c					yes	sr	c		yes	sr, res	ab, oc	Mar. 22			Nov. 11	yes
Yellow-headed blackbird																							
Red-winged blackbird	sr	c			yes	sr	ab	Mar. 20				May 8, June 20	sr	c		yes	sr	ab	Feb. 25			Nov. 11	yes
Meadowlark	sr	fc			yes	sr	fc	Mar			Nov	May 16	sr	c	Mar. 31	yes	sr, res	fc, oc	Feb. 20, Mar. 12			Nov. 27	yes
Orchard oriole						sr	rare					3 June '86					sr	c	May 2			Aug. 6	yes
Baltimore oriole	sr	c			yes	sr	ab	May 6			Aug. 31	June 1	sr	ab	May 4	yes	sr	ab	May 1, 6			Sept. 7, 9	yes
Bullock oriole																							
Rusty blackbird	tv	c				tv	fc						tv				tv	c	Mar. 10, 25	Apr	Oct	Nov. 27	
Purple grackle																	sr	c	Feb. 15, Mar. 10			Nov. 8	yes
Bronzed grackle	sr	c, local			yes	sr	c	Apr. 4				May 12	sr	c		yes	tv, sr	c					yes
Evening grosbeak	wv																						
Pine grosbeak	wv	c				wv	oc						wv	oc			wv	oc		Apr. 12	Dec. 18		
House sparrow	res				yes	res	ab					yes	res	ab		yes	res	ab					yes
Chaffinch																							
Greenfinch																							
Purple finch	sr	c			yes	sr	ab	Mar. 20				yes	sr	c		yes	tv, res	c, oc	Apr				yes
American crossbill	wv	c				wv	irreg						wv	oc			wv, res	irreg, rare		May 10, June	Oct., Nov. 3		30 Apr. '76
White-winged crossbill	wv	irreg, c				wv	rare										wv	irreg		Jan. 10, Mar. 15, May 10	Oct. 29, Nov. 18		
Hoary redpoll																							
Redpoll	wv	c				wv	c				Nov. 10		wv	oc			wv	c, irreg		Mar. 6	Nov. 25		
Holboell redpoll	wv	once, 27 Jan. '90																		12, 13 Feb '83			
Greater redpoll	wv	twice, Jan. 2, 11															av						
European linnet																	av						yes
American goldfinch	sr	c			yes	sr	ab					July	sr	c		yes	res	ab		May 24	Dec. 24		25 May '83
Pine siskin	wv	oc				wv	oc						wv	oc			wv, res	c, irreg, rare					
European goldfinch																	res	unc		Mar. 22	Oct. 25		
Snowflake	wv	c				wv	c		Mar. 17	Nov			wv	c			wv	irreg					
Lapland longspur																	wv	rare					
Chestnut-collared longspur																						Nov. 2	
Vesper sparrow	sr	c																					
Ipswich sparrow					yes	sr	ab	Apr. 5			Nov. 5	May 5	sr	c		yes	sr, res	c, oc	Mar. 29, Apr. 4				
Savanna sparrow	sr	fc																			Aug. 28	Oct. 28	yes
Baird sparrow						sr	unc					May 8	sr	fc		yes	tv, sr	c, oc	Apr. 3				
Grasshopper sparrow																						Oct 23	yes
Henslow sparrow						sr	c	Apr. 30				May 10					sr	c	Apr. 27		Oct. 5, 10	Nov. 3	
Leconte sparrow																	tv	rare					
Sharp-tailed sparrow																							
Nelson sparrow																	sr	local			Sept 25, 28	Oct 17	
Acadian sharp-tailed sparrow																	tv	fc			Sept. 29	Oct. 10	
Seaside sparrow																	tv	rare					
Lark sparrow																	av						
White-crowned sparrow	tv	fc																					
Gambel sparrow						tv	fc						tv	fc			tv	unc	May 6	May 26	Oct. 3	Oct. 30	
White-throated sparrow	tv, sr	c, oc																					
Tree sparrow	wv	c				tv, sr	c, fc					May 20	tv	c			tv, wv	c, unc	Apr. 10	May 21	Sept 20	Oct. 20	
Chipping sparrow	sr	c				wv	c						wv	c			wv	ab		Apr. 16, 27	Oct. 10		
Field sparrow	sr	fc			yes	sr	ab	Apr. 18			Oct	May 20	sr	c	Apr. 15	yes	sr	ab	Apr 9, 15			Nov. 9	yes
Slate-colored junco	tv, sr	ab, fc			yes	sr	c	Apr. 15, 20			Oct. 15	May 10	sr	c	Apr. 15	yes	sr	c	Mar. 7, Apr 2			Nov. 7	yes
Carolina junco					yes	tv, sr	ab, fc					May 11, June 10	tv, wv	ab, unc			wv	ab		May 4	Sept. 19		
Song sparrow	sr	ab																					yes
Lincoln sparrow					yes	sr	ab	Mar. 15			Oct. 22	May 5	sr, res	ah, oc	Mar. 12	yes	sr, res	ab, fc		May 23	Sept. 29	Oct 16, Nov. 3	
Swamp sparrow	sr	unc											tv	unc			tv	unc	May 7			Dec. 2	yes
Fox sparrow	tv				yes	sr	unc	Apr. 21				May 7	sr	fc		yes	sr, res	ab, local, oc	Apr 4	Apr. 20	Oct. 14	Nov. 28	
Towhee	sr	c				tv	c	Mar. 23	Apr. 15	Oct. 5	Nov. 13		sr	fc			tv	c	Mar. 4			Oct 31	yes
Cardinal				Sept. 23	yes	sr	ab	May 1, 10				May 21		local		yes	sr, tv	c, ab	Apr. 21, 27				yes
																	res	rare					

SPECIES RECORDED	WYOMING				
	Resident or transient	Common or rare	Breeds	Resident or transient	Con ra
Barred owl				res	rare
Great gray owl					
Richardson owl					
Saw-whet owl				wv	unc.
Screech owl	res	c	yes	res	fc
Great horned owl	res	fc	yes	res	unc.
Snowy owl				wv	oc
American hawk owl					
Burrowing owl					
Carolina paroquet					
Yellow-billed cuckoo	sr	fc		sr	c
Black-billed cuckoo	sr	fc		sr	c
Belted kingfisher	sr	c	yes	sr	c
Hairy woodpecker	res	fc		res	c
Downy woodpecker	res	c	yes	res	ab
Arctic three-toed woodpecker					
Am. three-toed woodpecker					
Yellow-bellied sapsucker	tv	fc		tv, sr	c, ra
North. pileated woodpecker					
Red-headed woodpecker	sr			sr, res	c, oc
Red-bellied woodpecker				tv, sr	fc, lo
Northern flicker	sr	c	yes	sr, res	c, oc
Whip-poor-will				sr	fc
Nighthawk	tv	c		sr, tv	oc, c
Chimney swift	sr	ab	yes	sr	ab
Ruby-throated hummingbird	sr	c	yes	sr	c
Kingbird	sr	c	yes	sr	c
Gray kingbird					
Arkansas kingbird					
Crested flycatcher	sr	fc	yes	sr	c
Phoebe	sr	c	yes	sr	ab
Olive-sided flycatcher				tv	once
Wood pewee	sr	c	yes	sr	c
Yellow-bellied flycatcher				tv	unc.
Green-crested flycatcher					
Alder flycatcher				sr	unc.
Least flycatcher	sr		yes	sr	c
Skylark					
Horned lark				wv	
Hoyt horned lark					
Prairie horned lark	sr	c	yes	res	ab
Blue jay	res		yes	res	fc
Canada jay					
Northern raven					
American crow	res	ab	yes	res	ab
Fish crow					
Starling					
Bobolink	sr	c	yes	sr	fc
Cowbird	sr	c	yes	sr, res	c, oc
Yellow-headed blackbird					
Red-winged blackbird	sr	c	yes	sr	c
Meadowlark	sr	c	yes	sr, res	fc, o
Orchard oriole				sr	rare
Baltimore oriole	sr	c	yes	sr	c
Bullock oriole					
Rusty blackbird	tv			tv	c
Purple grackle					
Bronzed grackle	sr	c	yes	sr	c
Evening grosbeak					
Pine grosbeak				wv	oc
House sparrow	res	ab	yes	res	ab
Chaffinch					
Greenfinch					
Purple finch	sr		yes	sr	c
American crossbill				wv	c, irr
White-winged crossbill				wv	oc
Hoary redpoll					
Redpoll				wv	fc
Holboell redpoll					
Greater redpoll					
European linnet					
American goldfinch	sr, res	ab, oc	yes	sr, res	ab, f
Pine siskin				wv	oc
European goldfinch					
Snowflake	wv			wv	
Lapland longspur				wv	rare
Chestnut-collared longspur					
Vesper sparrow	sr	ab	yes	sr	ab
Ipswich sparrow					
Savanna sparrow	sr	fc	yes	tv, sr	c, un
Baird sparrow					
Grasshopper sparrow				sr	
Henslow sparrow					
Leconte sparrow					
Sharp-tailed sparrow					
Nelson sparrow					
Acadian sharp-tailed sparrow				tv	rare
Seaside sparrow					
Lark sparrow					
White-crowned sparrow	tv			tv	c
Gambel sparrow					
White-throated sparrow	tv	c		tv	c
Tree sparrow	wv	c		wv	ab
Chipping sparrow	sr	c	yes	sr	c
Field sparrow	sr	c	yes	sr	fc
Slate-colored junco	sr, tv, wv	local, ab, unc.	yes	tv, res	ab, u
Carolina junco					
Song sparrow	sr	ab	yes	sr, res	ab, u
Lincoln sparrow				tv	rare
Swamp sparrow	sr	local	yes	sr, tv	fc, c
Fox sparrow	tv			tv	unc.
Towhee	sr			sr	c
Cardinal				av	

YATES

es n h	Leaves for north	Returns from north	Departs for south	Breeds
				Apr. 1, 18
		Dec. 30		
				Apr. 5, 15, May 20
				Feb. 22, Mar. 12, Apr. 10
			Sept. 8	May 24, June 5, Aug. 19
				May 20, June 1, 18
pr. 13			Oct. 11, 21	May 10, 20, June 22
				May 4, 10
				May 4, 15, 25
5		Sept. 15	Oct. 15	May 17
				May 20, June 3, 10
pr. 8			Oct. 13	May 10
			Oct. 13, Nov. 4	May 13, 30
ay 4			Sept. 11	May 20, 25, June 20
		Aug. 24	Sept. 15	
5, 30			Sept. 24, 27	June 15, 20, July 4
			Aug. 31	June 6, 20, Aug. 20
ay 11			Sept. 6	June 1, 10, July 14
ay 8			Sept. 9	June 4, 20
5, 30			Oct. 7, 15	Apr. 27, May 10, June 26
			Sept. 16	June 5, 20, July 21
	May 17, 26			
				June 13, 15, July 22
5, May 2			Aug. 21	May 24, 30, June 16
				Mar. 28, Apr. 10, 23
				May 1, June 10
				Apr. 9, 20, May 17
ay 6			Sept. 7, 13	May 27, 30, June 8
7			Oct. 30	May 7
			Oct. 25, Nov. 16	May 4, 20, June 16
5			Oct. 31, Nov. 17	May 12, 19, July 21
ay 1			Sept. 1, 9	May 15, 30, June 4
	May 3	Sept. 25	Oct. 30	
5			Oct. 15, Nov. 15	Apr. 22, 30; May 30
	15 Mar. '96			
				Apr. 6, June 29
9			Sept. 27, Oct. 15	May 9, 30, July 10
	Apr. 8, May 12	Nov. 24		
	Apr. 20	Feb. 4, 25		
				July 19, 27; Aug. 19
	Mar. 25, May	Nov. 7		
	Mar. 6	Oct. 22		
pr. 2, 13			Oct. 28	Apr. 28, July 22
			Oct.	
				yes
		7 Oct. '96		
ay 6	May 30	Oct. 6	Oct. 15	
5	May 16	Sept. 2, 30	Oct. 15, 21	
	Apr. 20	Oct. 4, 27		
			Oct. 15	May 6, 15, July 23
			Oct. 18	May 19, 20, July 21
	May 10	Sept. 14	Oct. 18	Apr. 25, May 25
				May 1, June 21, Aug. 19
		Oct. 13		
5			Oct. 28	May 12, June 13
pr. 8	Apr. 18	Oct. 20	Nov. 8	
			Oct. 20	May 20

SPECIES RECORDED	WYOMING			YATES						
	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds
Barred owl				res	rare					Apr 1, 18
Great gray owl										
Richardson owl										
Saw-whet owl				wv	unc			Dec. 30		
Screech owl	res		yes	res	fc					Apr. 5, 15, May 20
Great horned owl	res	fc	yes	res	unc					Feb. 22, Mar. 12, Apr. 10
Snowy owl				wv	oc					
American hawk owl										
Burrowing owl										
Carolina paroquet										
Yellow-billed cuckoo	sr	fc		sr	c	May 10, 20			Sept. 8	May 24, June 5, Aug. 19
Black-billed cuckoo	sr	fc		sr	c	May 16				May 20, June 1, 18
Belted kingfisher	sr	c	yes	sr	c	Mar. 30, Apr. 13			Oct. 11, 21	May 10, 20, June 22
Hairy woodpecker	res	fc		res	c					May 4, 10
Downy woodpecker	res	c	yes	res	ab					May 4, 15, 25
Arctic three-toed woodpecker										
Am. three-toed woodpecker										
Yellow-bellied sapsucker	tv	fc		tv, sr	c, rare	Apr. 13, 16		Sept. 15	Oct. 15	May 17
North. pileated woodpecker										
Red-headed woodpecker	sr			sr, res	c, oc	Apr. 12				May 20, June 3, 10
Red-bellied woodpecker				tv, sr	fc, local	Mar. 15, Apr. 8			Oct 13	May 10
Northern flicker	sr	c	yes	sr, res	c, oc	Apr. 4, 16			Oct. 13, Nov. 4	May 13, 30
Whip-poor-will				sr	fc	Apr. 30, May 4			Sept. 11	May 20, 25, June 20
Nighthawk	tv	c		sr, tv	oc, c	May 2, 11		Aug. 24	Sept. 15	
Chimney swift	sr	ab	yes	sr	ab	Apr. 21, 26, 30			Sept. 24, 27	June 15, 20, July 4
Ruby-throated hummingbird	sr	c	yes	sr	c	May 8, 14			Aug. 31	June 6, 20, Aug. 20
Kingbird	sr	c	yes	sr	c	Apr. 25, May 11			Sept. 6	June 1, 10, July 14
Gray kingbird										
Arkansas kingbird										
Crested flycatcher	sr	fc	yes	sr	c	Apr. 26, May 8			Sept. 9	June 4, 20
Phoebe	sr	c	yes	sr	ab	Mar. 18, 26, 30			Oct. 7, 15	Apr. 27, May 15, June 26
Olive-sided flycatcher				tv	once taken					
Wood pewee	sr	c	yes	sr	c	May 10, 15			Sept. 16	June 5, 25, July 21
Yellow-bellied flycatcher				tv	unc	May 7, 10	May 17, 26			
Green-crested flycatcher										
Alder flycatcher				sr	unc	May 22, 30				June 13, 15, July 22
Least flycatcher	sr		yes	sr	c	Apr. 26, 30, May 2			Aug. 21	May 24, 30, June 16
Skylark										
Horned lark				wv						
Hoyt horned lark										
Prairie horned lark	sr	c	yes	res	ab					Mar. 28, Apr. 10, 23
Blue jay	res		yes	res	fc					May 1, June 10
Canada jay										
Northern raven										
American crow	res	ab	yes	res	ab					Apr. 9, 20, May 17
Fish crow										
Starling										
Bobolink	r	c	yes	sr	fc	Apr. 30, May 6			Sept. 7, 13	May 27, 30, June 8
Cowbird	sr	c	yes	sr, res	c, oc	Mar. 21, 27			Oct. 30	May 7
Yellow-headed blackbird										
Red-winged blackbird	sr	c	yes	r	c	Mar. 5, 23			Oct. 25, Nov. 16	May 4, 20, June 16
Meadowlark	sr	c	yes	sr, res	fc, oc	Mar 16, 20			Oct. 31, Nov. 17	May 12, 19, July 21
Orchard oriole				sr	rare	May 6				
Baltimore oriole	sr	c	yes	r	c	Apr. 28, May 1			Sept 4, 9	May 15, 30, June 4
Bullock oriole										
Rusty blackbird	tv			tv	c	Apr. 20	May 3	Sept 25	Oct. 30	
Purple grackle										
Bronzed grackle	sr	c	yes	sr	c	Mar. 16, 25			Oct. 15, Nov. 15	Apr. 22, 30; May 30
Evening grosbeak										
Pine grosbeak				wv	oc		15 Mar. '96			Apr. 6, June 29
House sparrow	res	ab	yes	res	ab					
Chaffinch										
Greenfinch										
Purple finch	sr		yes	r	c	Mar. 20, 29			Sept. 27, Oct. 15	May 9, 30, July 10
American crossbill				wv	c, irreg		Apr 8, May 12	Nov. 24		
White-winged crossbill				wv	oc		Apr. 20	Feb. 4, 25		
Hoary redpoll										
Redpoll				wv	fc					
Hoffbell redpoll										
Greater redpoll										
European linnet										
American goldfinch	sr, res	ab, oc	yes	sr, res	ab, fc					July 19, 27; Aug. 19
Pine siskin				wv	oc		Mar. 25, May	Nov. 7		
European goldfinch										
Snowflake	wv			wv			Mar. 6	Oct. 22		
Lapland Longspur				wv	rare					
Chestnut-collared longspur										
Vesper sparrow	sr	ab	yes	sr	ab	Mar. 27, Apr. 2, 13			Oct. 28	Apr. 28, July 22
Ipswich sparrow										
Savanna sparrow	sr	fc	yes	tv, sr	c, unc	Mar. 28			Oct	
Baird sparrow										yes
Grasshopper sparrow				sr		May 9				
Henslow sparrow										
Leconte sparrow										
Sharp-tailed sparrow										
Nelson sparrow										
Acadian sharp-tailed sparrow				tv	rare			7 Oct. '96		
Seaside sparrow										
Lark sparrow										
White-crowned sparrow	tv			tv	c	Apr. 23, May 6	May 30	Oct. 6	Oct. 15	
Gambel sparrow										
White-throated sparrow	tv			tv	c	Apr. 14, 26	May 16	Sept. 2, 30	Oct. 15, 21	
Tree sparrow	wv	c		wv	ab		Apr. 20	Oct. 4, 27		
Chipping sparrow	sr	c	yes	sr	c	Apr. 12			Oct. 15	May 6, 15, July 23
Field sparrow	sr	c	yes	sr	fc	Apr. 6, 15			Oct 18	May 10, 20, July 21
Slate-colored junco	sr, tv, wv	local, ab, unc	yes	tv, res	ab, unc	Mar. 20	May 10	Sept. 14	Oct. 18	Apr. 25, May 25
Carolina junco										May 1, June 21, Aug. 19
Song sparrow	sr	ab	yes	sr, res	ab, unc					
Lincoln sparrow				tv	rare			Oct. 13		
Swamp sparrow	sr	local	yes	sr, tv	fc, c	Apr. 14, 26			Oct 28	May 12, June 13
Fox sparrow	tv			tv	unc	Mar. 15, Apr. 8	Apr. 18	Oct. 20	Nov 8	
Towhee	sr			sr	c	Apr. 23			Oct. 20	May 20
Cardinal				av						

SPECIES RECORDED	GIRAUD, LONG ISLAND, 1844							DE KAY, NEW YORK STATE, 1844
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient
Rose-breasted grosbeak	sr	unc	May			fall		sr, breeds
Blue grosbeak								Manhattan, 15 May '38. Only record
Indigo bunting	sr	c	May			Sept	June, late	May to Sept. Breeds
Painted bunting								
Dickcissel	sr		May 15			Sept., early	yes	Arrives in May. Breeds in every part of Atlantic &
Lark bunting								
Louisiana tanager								
Scarlet tanager	sr	fc	May, early				yes	May to Sept. Breeds
Summer tanager								sv
Purple martin	sr		Apr., early			fall	yes	Apr. to Aug. Breeds
Cliff swallow	1843(first)							sr. June & July. Breeds
Barn swallow	sr	ab	spring					Apr. to Aug. One of our most common visitors
Tree swallow	tv	c	spring		Aug			Very numerous on marshes on L. I. Apr. to Sept
Bank swallow	sr		spring				yes	sr. Breeds
Rough-winged swallow								
Bohemian waxwing	wv	oc, 1830-32						Autumn of 1835 near Albany
Cedar waxwing	sr		spring, early				June, early	Well known. Frequently remains throughout winter
Northern shrike	wv			spring, early				Found at all seasons. Breeds
Migrant shrike								Confused with the Northern shrike
Red-eyed vireo	sr	c	May				May, late	Breeds throughout State. Common
Philadelphia vireo								
Warbling vireo		unc						May to Oct. Breeds
Yellow-throated vireo	sr	fc					yes	May to Sept
Blue-headed vireo		unc						Rarest of genus in State
Plumbeous vireo								
White-eyed vireo	sr						yes	Common. Apr. to Oct. Breeds
Black and white warbler	sr	c	spring					Common throughout State. Apr. to Sept
Prothonotary warbler								
Worm-eating warbler		occurs						May to Sept. Not abundant
Blue-winged warbler		rare						Have met with two specimens. Breeds (?)
Golden-winged warbler		unc, irreg						Rare. Early May, Kings co
Lawrence warbler								
Brewster warbler								
Nashville warbler	tv	c	May 15					Rare. Breeds farther north. Arrives middle of M
Orange-crowned warbler								Undoubtedly belongs here
Tennessee warbler								Rare. Putnam co., Sept. 5
Southern parula warbler								
Northern parula warbler		ab					(?)	Arrives early in May. Very common. Breeds
Cape May warbler		once						Very rare. One taken in May on L. I
Yellow warbler	sr		spring, early				yes	Very common. Breeds in every part of State
Black-throated blue warbler	tv	fc	Apr., late–May, early					Apr. & Nov. More common in western and northe
Myrtle warbler	tv	ab				fall, late		Common. Early May & Nov
Magnolia warbler	tv	c, irreg	May					Occasionally the rarest, at other times more commo
Cerulean warbler								Exceedingly rare. Will doubtless be found here
Chestnut-sided warbler	tv		spring		fall, early			Rare. May 20 & Aug. 20
Bay-breasted warbler	tv	c, irreg	spring					Usually rare. Taken May 20, near Albany
Black-poll warbler	tv							One of our most common species. Passes north in
Blackburnian warbler	tv	unc						sr. May 1 to Aug. Breeds
Yellow-throated warbler								
Black-throated green warbler	tv		spring					Somewhat rare. May 10 to Oct
Pine warbler	sr	c					yes	Not uncommon. Early Apr. to Oct. Breeds
Palm warbler								Seldom noticed. Sept. 20, near New York
Yellow palm warbler	tv	unc						included with Palm warbler
Prairie warbler	sr						yes	Not uncommon on L. I. In great numbers on Lak
Ovenbird	sr	c					yes	Common. Late Apr. to late Sept. Breeds
Water-thrush	tv		Apr., late		Aug., late			Migrant. May & late Aug
Grinnell water-thrush								
Louisiana water-thrush								
Kentucky warbler		rare						Rare. A few from L. I. & Rockland co
Connecticut warbler								
Mourning warbler		once						Taken in Rockland co. and on L. I. Rare
Northern yellow-throat	sr	ab	May, early			Sept., early	yes	Common. May to Sept. Breeds
Yellow-breasted chat	sr	c	May 15			Sept	yes	Common in southern parts of State. Early May to
Hooded warbler	tv	c	May					Rare. Westchester co., middle of May
Wilson warbler		rare						Once shot near New York in early May
Canadian warbler	tv	c, irreg						Occasionally very rare. Early May
American redstart	sr	c	Apr., late			Sept., late	yes	Last of Apr. to Sept
American pipit	tv	fc						Migrant. Early May & Oct
Mockingbird		oc					yes	Comparatively rare. Breeds. Queens & Rocklan
Catbird	sr	c	Apr., late				May, early	Familiar. Arrives in Apr
Brown thrasher	sr		Apr., late–May, early				yes	sr. Sometimes winters. Breeds throughout State
Carolina wren	sv	oc						Rare visitor. Westchester & Rockland co. in Dec
House wren	sr	c	May 15			Sept., late	yes	Well known. Late Apr. to Sept
Winter wren	wv			spring, early	Oct			Resident. Breeds in great numbers near Oneida la
Short-billed marsh wren	(?)							Not numerous. Late Apr. to Sept
Long-billed marsh wren	sr	c						Probably breeds
Brown creeper	res							Resident. Breeds. Considered uncommon
White-breasted nuthatch	res	c					Apr., early	Resident
Red-breasted nuthatch	wv	fc		Apr	Oct			Migrant. Spring and fall
Brown-headed nuthatch								
Tufted titmouse	res	fc					yes	In southern counties first of May till late autumn
Chickadee	res	c					yes	Abundant in northern counties. Rather rare in s
Carolina chickadee								[district. R
Hudsonian chickadee								
Golden-crowned kinglet	tv	c	Apr. 15	May, late	Sept	Dec		Rare
Ruby-crowned kinglet	tv	fc	Apr. 15			Sept., late		Migrant. Apr. & Nov
Blue-gray gnatcatcher		scarce						Early May to Sept. Not numerous
Townsend solitaire								
Wood thrush	sr		Apr., late–May, early				yes	sr. Breeds
Wilson thrush	sr		spring					Arrives the last of Apr. Breeds
Gray-cheeked thrush								
Bicknell thrush								
Olive-backed thrush	tv	c						Probably breeds farther north
Hermit thrush	tv	c	May 15				yes, rarely	In every part of State. Arrives middle of May
American robin	res	ab					yes	Familiar. Resident. Breeds
Varied thrush								
Wheatear								
Bluebird	sr		Mar., early			fall, late	2 broods	Middle of Mar. to Nov. Sometimes winters. Several

ENCE, YORK CINITY, 66	ROOSEVELT & MINOT, FRANKLIN COUNTY, 1877	MEARNS, HUDSON HIGHLANDS, 1879–1890						
urs	Common or rare	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds
		sr.		May 4, 9, 13			Sept. 21	yes
		sr.	c.	May 4, 10, 15			Sept. 20	yes
			once, 21 Dec. '81					
	2 pairs	sr.	c.	May 3, 9, 14			Oct. 3–8	June 4
City			once	12 May '83				
	1 at Malone	sr.	becoming rare	Apr. 9				yes
	seen near Malone	sr.	c.	Apr. 16, 30, May 22			Sept. 10	yes
	seen	sr.	ab.	Apr. 22, 25, 30			Sept. 6, 19	June 1
	tv, c; sr, oc	sr, tv	ab.	Apr. 17, 20, 30				yes
	rather rare	sr.	c.	May 21, 27			Aug. 27	yes
		sr.	rare					May
		wv	rare					
	c	res.	c.					
		wv	fc at times		Mar. 28, 31	Nov. 9, 16		
	ab	sr.	ab.	May 4, 12, 18			Oct. 4, 8	May 28
		tv	once, 24 Sept. '75					
		sr.	fc	May 7, 9, 20				yes
		sr, tv	c.	Apr. 27, May 8, 16			Sept. 19	May 25
	ab	tv	c.	Apr. 23, May 8, 13	May 18, 24	Sept	Oct.	
		sr.	ab.	May 4, 12, 21				May 28
		sr, tv	c, ab.	Apr. 26, 30, May 8			Oct. 14	yes
		sr.	fc	May 8, 11, 15				yes
		sr.		May 12–17				yes
		sr.		May 10, 12, 15				
	unc	tv, sr.	ab, rare	May 6, 11, 13			Sept. 16–21	yes
		tv	rare	May 13				
	(?)	tv	rare, ab at times					
	ab	tv, sr.	ab, unc.	Apr. 27, May 5, 12			Oct. 8	yes
		tv	rather rare	May 14, 15, 20		Sept. 8	Sept. 20	
	c, near Malone	sr.	fc	May 9, 12, 17			Sept. 3	yes
	c	tv	ab.	May 4, 7, 12	May 18, 22	Sept. 11–24	Oct. 5–17	
	c, Aug	tv, wv	very ab, oc	Apr. 17	May 20–28	Sept. 23–28	Dec. 1	
	unc	tv	c.	May 8, 11, 16	May 22–28	Sept. 6–11	Oct. 5	
		tv	rare	17 May '75				
		sr.	ab.	May 3, 9, 12			Sept. 30	May 26
		tv	ab.	May 14, 16, 22	May 26–29	Sept. 19	Oct.	
		tv	c.	May 9, 14, 23	May 28–29	Sept. 9	Oct. 16	
	c	tv	very c.	May 7, 10, 15	May 28	Sept. 20	Oct. 10	
	c	sr, tv	unc, very ab	May 1, 7, 16			Oct. 21, 28	yes
		tv	rather rare	Apr. 11, 16, May 3		Aug., late		
		tv	c.	Apr. 11, 14, 30	May 5, 8	Sept. 20	Oct. 24	
		sr.	rare					yes
	c	sr.	c.	Apr. 26, May 5, 10			Oct. 16	May 30
	rare	tv	fc	Apr. 26, May 5	May 24–29	Aug. 31	Sept. 16	
		sr.	c.	Apr. 15, 20, 30			fall, early	May 7, 15
	fc, local	tv	rare	May 13	May 26			
	fc	sr.	c.	May 4, 7, 11			Oct. 15	May 24
		sr.	c.	May 1, 7, 24				June 1
		sr.	very c.	May 4, 8, 15			Sept. 5–8	May 26
		tv	very rare	May 12, 17				
	unc	tv	very c.	May 10, 12, 18	May 25–28	Sept. 9		
		sr.	c.	Apr. 27, May 3, 11			Sept. 23, Oct. 4	
		tv	oc			Oct. '75	9 Nov. '76	
	near Malone	sr.	very c.	Apr. 27, May 4, 10			Oct. 16	May 15
		sr.	ab.	Apr. 26, 30, May 8			Oct. 9	May 24
		sr.	ab.	Apr. 28, 30, May 7			Oct. 16	yes
	fc	tv, wv	ab, fc		Apr. 27, May 1	Sept. 29, Oct. 4		
		sr.	local					June '82
		sr.	c.	May 4, 21			Sept. 23, Oct. 1	June 1
	c	wv	ab, irreg.					
		res.	usually c					
	c	wv, tv	irreg, ab at times	Mar.		Aug. 25	Sept. 23	
	unc, June; ab, Aug.	res.	c.	May 11				yes
	unc							
	fc	wv	ab.		May 4, 7	Sept. 28, Oct. 3		
		tv	ab.	Apr. 7, 13, 23	May 8, 12, 18	Sept. 22	Nov. 2	
		sr.	c.	Apr. 30, May 7, 13			Sept. 20, Oct. 5	May 11
		sr, tv	rather scarce, c.	May 5, 8, 15				
		tv	ab.	May, late		Sept. 23	Oct. 19	
	commonest thrush	tv	very c.	May 9, 11, 15	May 27–31	Sept. 12	Oct. 19	
	c, sings till Aug. 15	tv, wv	very ab, oc	Mar. 26, Apr. 1–22	Apr. 26, May 3–12	Oct. 7–15	Oct. 28, Nov. 9	
	fc	sr, wv	ab, fc					Apr. 27, May 7
	c, near Malone	sr, wv	ab, oc.	Feb. 10			Dec. 1	Apr. 10, 28

SPECIES RECORDED	GIRAUD, LONG ISLAND, 1844							DE KAY, NEW YORK STATE, 1844	LAWRENCE, NEW YORK AND VICINITY, 1866	ROOSEVELT & MINOT, FRANKLIN COUNTY, 1877	MEARNS, HUDSON HIGHLANDS, 1879–1890						
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Occurs	Common or rare	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds
Rose-breasted grosbeak	sr.	unc.	May			fall		ar, breeds			sr.		May 4, 9, 13			Sept. 21	yes
Blue grosbeak								Manhattan, 15 May '38. Only record	rare								
Indigo bunting	sr.	c.	May			Sept.	June, late	May to Sept. Breeds	x		sr.	c.	May 4, 10, 15			Sept. 20	yes
Painted bunting																	
Dickcissel	sr.		May 15			Sept., early	yes	Arrives in May. Breeds in every part of Atlantic & western district	x								
Lark bunting											tv						
Louisiana tanager												once, 21 Dec. '81					
Scarlet tanager	sr.	fc.	May, early				yes	May to Sept. Breeds	x	2 pairs	sr.	c.	May 3, 9, 14			Oct. 3–8	June 4
Summer tanager								sv	Atlantic City			once	12 May '83				
Purple martin	sr.		Apr., early			fall	yes	Apr. to Aug. Breeds	x	1 at Malone	x	becoming rare	Apr. 9				yes
Cliff swallow	1843 (first)							sr. June & July. Breeds	x	seen near Malone	sr.	c.	Apr. 16, 30, May 22			Sept. 10	yes
Barn swallow	sr.	ab.	spring					Apr. to Aug. One of our most common visitors	x	seen	sr.	ab.	Apr. 22, 25, 30			Sept. 6, 10	June 1
Tree swallow	tv.	c.	spring		Aug.			Very numerous on marshes on L. I. Apr. to Sept	x	tv, c; sr, oc	sr, tv	ab.	Apr. 17, 20, 30				yes
Bank swallow	sr.		spring				yes	sr. Breeds	x	rather rare	sr.	c.	May 21, 27			Aug. 27	yes
Rough-winged swallow											sr.	rare					May
Bohemian waxwing	wv.	oc, 1830–32						Autumn of 1835 near Albany	x		wv.	rare					
Cedar waxwing	sr.		spring, early				June, early	Well known. Frequently remains throughout winter. Breeds	x	c.	res.	c.					
Northern shrike	wv.			spring, early				Found at all seasons. Breeds	x		wv.	fc at times		Mar. 28, 31	Nov. 9, 16		
Migrant shrike								Confused with the Northern shrike									
Red-eyed vireo	sr.	c.	May				May, late	Breeds throughout State. Common	x	ab.	sr.	ab.	May 4, 12, 18			Oct. 4, 8	May 28
Philadelphia vireo											tv.	once, 24 Sept. '75					
Warbling vireo		unc.						May to Oct. Breeds	x		sr.	fc.	May 7, 9, 20				yes
Yellow-throated vireo	sr.	fc.					yes	May to Sept	x		sr, tv	c.	Apr. 27, May 8, 16			Sept. 19	May 25
Blue-headed vireo		unc.						Rarest of genus in State	x	ab.	tv.	c.	Apr. 23, May 8, 13	May 18, 24	Sept.	Oct.	
Plumbeous vireo																	
White-eyed vireo	sr.						yes	Common. Apr. to Oct. Breeds	x		sr.	ab.	May 4, 12, 21				May 28
Black and white warbler	sr.	c.	spring					Common throughout State. Apr. to Sept	x		sr, tv	c, ab.	Apr. 26, 30, May 8			Oct 14	yes
Prothonotary warbler																	
Worm-eating warbler		occurs						May to Sept. Not abundant	x		sr.	fc.	May 8, 11, 15				yes
Blue-winged warbler		rare						Have met with two specimens. Breeds (?)	x		sr.		May 12–17				yes
Golden-winged warbler		unc, irreg.						Rare. Early May, Kings co	x		sr.		May 10, 12, 15				
Lawrence warbler																	
Brewster warbler																	
Nashville warbler	tv	c.	May 15					Rare. Breeds farther north. Arrives middle of May	x	unc	tv, sr.	ab, rare	May 6, 11, 13			Sept. 16–21	yes
Orange-crowned warbler								Undoubtedly belongs here	x		tv.	rare	May 13				
Tennessee warbler								Rare. Putnam co., Sept. 5	x	(?)	tv.	rare, ab at times					
Southern parula warbler																	
Northern parula warbler		ab.					(?)	Arrives early in May. Very common. Breeds	x	ab.	tv, sr.	ab, unc.	Apr. 27, May 5, 12			Oct. 8	yes
Cape May warbler		once						Very rare. One taken in May on L. I	x		tv	rather rare	May 14, 15, 20		Sept 8	Sept. 20	
Yellow warbler	sr.		spring, early				yes	Very common. Breeds in every part of State	x	c, near Malone	sr.	fc.	May 9, 12, 17			Sept. 3	yes
Black-throated blue warbler	tv.	fc.	Apr., late–May, early					Apr. & Nov. More common in western and northern dist	x	c	tv.	ab.	May 4, 7, 12	May 18, 22	Sept. 11–24	Oct. 5–17	
Myrtle warbler	tv.	ab.				fall, late		Common. Early May & Nov	x	c, Aug	tv, wv	very ab, oc	Apr. 17	May 20–28	Sept. 23–28	Dec. 1	
Magnolia warbler	tv.	c, irreg.	May					Occasionally the rarest, at other times more common	x	unc	tv.	c.	May 8, 11, 16	May 22–28	Sept 6–11	Oct. 5	
Cerulean warbler								Exceedingly rare. Will doubtless be found here			tv.	rare	17 May '75				
Chestnut-sided warbler	tv.		spring		fall, early			Rare. May 20 & Aug. 20	x		sr.	ab.	May 3, 9, 12			Sept. 30	May 26
Bay-breasted warbler	tv.	c, irreg.	spring					Usually rare. Taken May 20, near Albany	x		tv.	ab.	May 14, 16, 22	May 26–29	Sept 19	Oct.	
Black-poll warbler	tv.							One of our most common species Passes north in May	x		tv.	c.	May 9, 14, 23	May 28–29	Sept. 9	Oct. 16	
Blackburnian warbler	tv.	unc.						sr. May 1 to Aug. Breeds	x	c	tv.	very c.	May 7, 10, 15	May 28	Sept. 20	Oct. 10	
Yellow-throated warbler																	
Black-throated green warbler	tv.		spring					Somewhat rare. May 10 to Oct	x	c	sr, tv.	unc, very ab	May 1, 7, 16			Oct. 21, 28	yes
Pine warbler	sr.	c.					yes	Not uncommon. Early Apr. to Oct. Breeds	x		tv.	rather rare	Apr. 11, 16, May 3		Aug., late		
Palm warbler								Seldom noticed. Sept. 20, near New York									
Yellow palm warbler	tv.	unc.						included with Palm warbler	x		tv.	c.	Apr. 11, 14, 30	May 5, 8	Sept. 20	Oct. 24	
Prairie warbler	sr.						yes	Not uncommon on L. I. In great numbers on Lake Erie	x		sr.	rare					yes
Ovenbird	sr.	c.					yes	Common. Late Apr. to late Sept. Breeds	x	c	sr.	c.	Apr. 26, May 5, 10			Oct. 16	May 30
Water-thrush	tv.		Apr., late		Aug., late			Migrant. May & late Aug	x	rare	tv.	fc.	Apr. 26, May 5	May 24–29	Aug. 31	Sept. 16	
Grinnell water-thrush																	
Louisiana water-thrush									x		sr.	c.	Apr. 15, 20, 30			fall, early	May 7, 15
Kentucky warbler		rare						Rare. A few from L. I. & Rockland co	x								
Connecticut warbler									x								
Mourning warbler		once						Taken in Rockland co. and on L. I. Rare	x	fc, local	tv.	rare	May 13	May 26			
Northern yellow-throat	sr.	ab.	May, early			Sept., early	yes	Common. May to Sept. Breeds	x	fc.	sr.	c.	May 4, 7, 11			Oct. 15	May 24
Yellow-breasted chat	sr.	c.	May 15			Sept.	yes	Common in southern parts of State. Early May to Aug	x		sr.	c.	May 1, 7, 24				June 1
Hooded warbler	tv.	c.	May					Rare. Westchester co., middle of May	sr, unc		sr.	very c.	May 4, 8, 15			Sept. 5–8	May 26
Wilson warbler		rare						Once shot near New York in early May	x		tv.	very rare	May 12, 17				
Canadian warbler	tv.	c, irreg.						Occasionally very rare. Early May	x	unc	tv.	very c.	May 10, 12, 18	May 25–28	Sept. 9		
American redstart	sr.	c.	Apr., late			Sept., late	yes	Last of Apr. to Sept	x		sr.	c.	Apr. 27, May 3, 11			Sept. 23, Oct. 4	
American pipit	tv.	fc.						Migrant. Early May & Oct	x		tv.	oc.			Oct. '75	9 Nov. '76	
Mockingbird		oc.						Comparatively rare. Breeds. Queens & Rockland co	sr, rare								
Catbird	sr.	c.	Apr., late				yes	Familiar. Arrives in Apr	x	near Malone	sr.	very c.	Apr. 27, May 4, 10			Oct. 16	May 15
Brown thrasher	sr.		Apr., late–May, early				May, early	sr. Sometimes winters. Breeds throughout State	x		sr.	ab.	Apr. 26, 30, May 8			Oct. 9	May 24
Carolina wren	wv.	oc.					yes	Rare visitor. Westchester & Rockland co. in Dec. Breeds	twice								
House wren	sr.	c.	May 15			Sept., late	yes	Well known. Late Apr. to Sept	x		sr.	ab.	Apr. 28, 30, May 7			Oct. 16	yes
Winter wren	wv.			spring, early	Oct.			Resident. Breeds in great numbers near Oneida lake	x	fc.	tv, wv.	ab, fc.		Apr. 27, May 1	Sept. 29, Oct. 4		
Short-billed marsh wren	(?)							Not numerous. Late Apr. to Sept	x		sr.	local					June '82
Long-billed marsh wren	sr.	c.						Probably breeds	x		sr.	c.	May 4, 21			Sept. 23, Oct. 1	June 1
Brown creeper	res.							Resident. Breeds. Considered uncommon	x	c	wv.	ab, irreg.					
White-breasted nuthatch	res.	c.					Apr., early	Resident	x		res.	usually c.			Aug. 25	Sept. 23	
Red-breasted nuthatch	wv.	fc.		Apr.	Oct.			Migrant. Spring and fall	x	c.	wv, tv	irreg, ab at times	Mar.				
Brown-headed nuthatch																	
Tufted titmouse	re.	fc.					yes	In southern counties first of May till late autumn	x								yes
Chickadee	res.	c.					yes	Abundant in northern counties. Rather rare in southern district. Resident	x	unc, June; ab, Aug	res.	c.	May 11				
Carolina chickadee																	
Hudsonian chickadee									x	unc				May 4, 7	Sept. 28, Oct. 3		
Golden-crowned kinglet	tv.	c.	Apr. 15	May, late	Sept.	Dec.		Rare	x	fc.	wv.	ab.		May 8, 12, 18	Sept. 22	Nov. 2	
Ruby-crowned kinglet	tv.	fc.	Apr. 15			Sept., late		Migrant. Apr. & Nov	x		tv.	ab.	Apr. 7, 13, 23				
Blue-gray gnatcatcher		scarce						Early May to Sept. Not numerous	x								
Townsend solitaire																	
Wood thrush	sr.		Apr., late–May, early				yes	sr. Breeds	x		sr.	c.	Apr. 30, May 7, 13			Sept. 20, Oct. 5	May 11
Wilson thrush	sr.		spring					Arrives the last of Apr. Breeds	x		sr, tv	rather scarce, c.	May 5, 8, 15		Sept. 23	Oct. 19	
Gray-cheeked thrush											tv.	ab.	May, late				
Bicknell thrush																	
Olive-backed thrush	tv.	c.						Probably breeds farther north	x	commonest thrush	tv.	very c.	May 9, 11, 15	May 27–31	Sept. 12	Oct. 19	
Hermit thrush	tv.	c.	May 15				yes, rarely	In every part of State. Arrives middle of May	x	c, sings till Aug. 15	tv, wv.	very ab, oc	Mar. 26, Apr. 1–22	Apr. 26, May 3–12	Oct. 7–15	Oct. 28, Nov. 9	Apr. 27, May 7
American robin	res.	ab.					yes	Familiar. Resident. Breeds	x	fc	sr, wv.	ab, fc					
Varied thrush									rare								
Wheatear									1, L. I							Dec 1	Apr. 10, 28
Bluebird	sr.		Mar., early			fall, late	2 broods	Middle of Mar. to Nov Sometimes winters. Several broods	x	c, near Malone	sr, wv.	ab, oc	Feb. 10				

SPECIES RECORDED	RATHBUN, CENTRAL NEW YORK, 1879					MERRIAM, ADIRONDACK REGION, 1881–18		
	Resident or transient	Common or rare	Arrives from south	Departs for south	Breeds	Resident or transient	Common or rare	Br
Rose-breasted grosbeak	sr	fc	May 15	Sept. 20			not unc	yes
Blue grosbeak								
Indigo bunting	sr	c	May 1	Sept. 30	yes		local	yes
Painted bunting								
Dickcissel								
Lark bunting								
Louisiana tanager								
Scarlet tanager	sr	c	May 10	Sept	yes	sr	c	yes
Summer tanager								
Purple martin	sr	c	Apr. 25	Aug. 30	yes		in villages	yes
Cliff swallow	sr	ab	Apr. 15	Aug. 30–early Sept			local	yes
Barn swallow	sr	ab	Apr. 15	Sept	yes		c	
Tree swallow	sr	ab	Apr. 15	Sept	yes		very c	
Bank swallow	sr	ab	May 5	Sept. 15			fc	
Rough-winged swallow		rare						
Bohemian waxwing								
Cedar waxwing	res, wr	c			yes, July, Aug	sr	c	yes
Northern shrike	wv		Mar. 15	Nov		wv	fc	
Migrant shrike	sr	fc	Mar. 25, Apr. 1	Oct	yes	sr	fc	
Red-eyed vireo	sr	ab	May 10		yes		c	
Philadelphia vireo	tv							
Warbling vireo	sr	c	May 10		yes		unc, local	
Yellow-throated vireo	sr	c	May 10		yes		fc	yes
Blue-headed vireo	tv	fc	Apr. 25				c	yes
Plumbeous vireo								
White-eyed vireo		rare						
Black and white warbler	tv	unc	Apr. 30	Sept			unc	yes
Prothonotary warbler								
Worm-eating warbler	tv	not rare						
Blue-winged warbler		rare						
Golden-winged warbler		rare						
Lawrence warbler								
Brewster warbler								
Nashville warbler	tv	fc	May, early				once, 19 Oct. '79	
Orange-crowned warbler								
Tennessee warbler	tv	fc		Sept. 18			not rare, local	yes
Southern parula warbler								
Northern parula warbler	sr	c	May 15	Sept. 20		sr	fc	
Cape May warbler	tv	unc					twice, 27 May '83	
Yellow warbler	sr	ab	Apr. 30, May 5	Sept. 30	yes		not very c	yes
Black-throated blue warbler	tv	c	May 10	Oct		sr	c	yes
Myrtle warbler	tv	ab	Apr. 25	Oct			ab	yes
Magnolia warbler	tv	c	May 18			sr	c	yes
Cerulean warbler	sr	fc	May 8, 10	Sept	yes			
Chestnut-sided warbler	sr	fc	May 10	Sept			c	yes
Bay-breasted warbler	tv	fc	May 10, 18	Sept. 30		tv	rather rare	
Black-poll warbler	tv	c	May 18	Sept. 30			once, 23 May '77	
Blackburnian warbler	(tv ?)	c	May 5	Sept. 30		sr	c	
Yellow-throated warbler								
Black-throated green warbler	tv	ab	Apr. 30, May 5	Sept. 30			c	yes
Pine warbler	tv	c					once, 8 May '77	
Palm warbler	tv	unc	Apr. 20				once, 13 Oct. '79	
Yellow palm warbler								
Prairie warbler								
Ovenbird	sr	c	May 10	Sept. 15	yes	sr	c	
Water-thrush	tv	c	May 1	Sept. 30		sr	rather rare	yes
Grinnell water-thrush								
Louisiana water-thrush							local	
Kentucky warbler								
Connecticut warbler	tv	very rare		Sept. 7, 17				
Mourning warbler	sr	unc	May 10	Sept	yes	sr	c	yes
Northern yellow-throat	sr	c	May 15	Sept. 20	yes	sr	fc	
Yellow-breasted chat	sv	rare						
Hooded warbler	sr	c, local		Sept	yes		once, 9 Sept. '78	
Wilson warbler	tv	(fc)	May 17	Sept. 17		tv	rare	
Canadian warbler	tv	c	May 10	Sept. 20			ab	yes
American redstart	sr	c	May 5	Sept	yes	sr	c	
American pipit	tv	c	May 14, 18	Oct. 30		tv		
Mockingbird								
Catbird	sr	ab	early May	Oct. 1	yes		local	yes
Brown thrasher	sr	irreg					local	
Carolina wren								
House wren	sr	c	early May	Oct	yes		local	yes
Winter wren	tv	ab	Apr. 1	Oct. 30	1 record		ab; Apr.–Oct	yes
Short-billed marsh wren	sr	(fc)			yes		once, 27 Oct. '77	(?)
Long-billed marsh wren	sr	ab	early Apr	Nov. 1	yes		local	yes
Brown creeper	res, tv	—, ab				sr	fc	yes
White-breasted nuthatch	res	ab			yes		not c	yes
Red-breasted nuthatch	tv	c	Apr. 1	Oct., Dec. 18			ab	yes
Brown-headed nuthatch								
Tufted titmouse								
Chickadee	res	ab			yes		c	yes
Carolina chickadee								
Hudsonian chickadee						wv	rare	(?)
Golden-crowned kinglet	tv, wv	ab, oc	Apr. 15	Nov. 1		tv	c	(?)
Ruby-crowned kinglet	tv	c	early Apr	early Oct		tv		
Blue-gray gnatcatcher		rare						
Townsend solitaire								
Wood thrush	sr	c	Apr. 27, May 5	Oct. 1	yes		rare	yes
Wilson thrush	sr	c	early May	Sept. 1	yes		c, locally	yes
Gray-cheeked thrush	tv	c	early May	Sept. 1, Oct. 1		tv	June 1	
Bicknell thrush							once, 24 May '78	
Olive-backed thrush	tv	c	early May	Sept. 1, Oct. 1		sr	fc	yes
Hermit thrush	tv	ab	early Apr	Oct. 15		sr	ab	
American robin	sr, wv	ab, oc			yes	sr	ab in fall	yes
Varied thrush								
Wheatear								
Bluebird	sr	ab	early Mar	Nov. 15	yes		local	yes

BICKNELL, CATSKILLS, 1882			LANGILLE, OUR BIRDS IN THEIR HAUNTS, 1884						
dent r sient	Common or rare	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds
	fc, below 3000 ft.	June 9	sr		May 1–10				May 25
	fc, clearings		sr						yes
	fc		sr						
			sr		Apr. 20			Aug. 25–Sept. 5	
	valleys	June 27	sr		Apr. 25–May 5				2 broods
	unc				Apr. 19				May 2[illegible], 2 broods
	beyond outskirts				Apr. 5			Oct. 15	yes
	undoubtedly occurs		sr		Apr. 25				May 25
			wv	rare					
	fc	June 15	sr, res	c, oc					
			wv	unc					
					Mar				Apr., July, 2 broods
	c		sr	ab					May 18–30
				oc					
	in villages		sr						yes
	on outskirts				Apr. 25				
	fc, up to 2700 ft.	June 5	tv		May				
	beyond outskirts		sr	oc					yes
	fc		sr						
				unc					
			sr		May 10			Sept	
	oc		tv	c	May 5				
	up to 2700 ft.		sr						
			tv	oc	May 10				
	valleys		sr		Apr. 25–May 5				
	c	June 8	tv	ab					
	Slide mt.		tv	c	Apr. 22				
	c	June 12			May 18				
			sr	c					
	c	May 25, June 10	sr	c	May 10				May 20–June 10
			tv	c at times	May 10				
	Slide mt.		tv		May 15				
	unc		tv	ab	May 11				
	fc		sr	ab, local	May 7				
	fc		sr	c					
	unc				Apr. 30				May 20–June 10
	fc, valleys								
	c, upper valleys	yes	sr	c					
	fc, valleys		sr						
			sr	c	May 10				May 25–June 15
			tv	c at times	May 15				
	fc	yes	sr	ab in swamps					
	fc, valleys		sr	c					
			tv		May 5		Oct.		
	c, valleys		sr	c	Apr. 30				2 broods
	unc, valleys		sr						yes
	fc		sr						
	c, valleys, mts.		sr	local					
			sr	local	May			Sept	
	beyond outskirts		sr	c, local	May			Oct.	
	Slide mt.		res						
	unc, valleys		res						
	3000 ft.				Apr	May 5	Sept.	Oct.	
	c		res	c					
	unc, Slide mt.		tv		Mar	Apr. 30			
			tv		Apr	May 1	Oct.		
	fc, up to 2500 ft.	June 15	sr						May 20–June 10
	c, up to 2000 ft.	June 8	sr	ab	May 5			Sept. 5	
	c, Slide mt.								
	fc, mts.		sr	rare					
	fc, mts.		tv		Apr. 10		Oct.		
	c	May 13	sr	ab	Mar. 3				
	ab; fc, valleys	June 9	sr	c	Mar. 3				

SPECIES RECORDED	RATHBUN, CENTRAL NEW YORK, 1879					MERRIAM, ADIRONDACK REGION, 1881–1884			BICKNELL, CATSKILLS, 1882			LANGILLE, OUR BIRDS IN THEIR HAUNTS, 1884						
	Resident or transient	Common or rare	Arrives from south	Departs for south	Breeds	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds
Rose-breasted grosbeak	sr	fc	May 15	Sept. 20			not unc	yes	sr	fc, below 3000 ft	June 9	sr		May 1–10				May 25
Blue grosbeak																		
Indigo bunting	sr	c	May 1	Sept. 30	yes		local	yes	sr	fc, clearings		sr						yes
Painted bunting																		
Dickcissel																		
Lark bunting																		
Louisiana tanager																		
Scarlet tanager	sr	c	May 10	Sept	yes	sr	c	yes	sr	fc		sr						
Summer tanager																		
Purple martin	sr	c	Apr. 25	Aug. 30	yes		in villages	yes	local			sr		Apr. 20			Aug. 25–Sept. 5	
Cliff swallow	sr	ab	Apr. 15	Aug. 30–early Sept.			local	yes	sr	valleys	June 27	sr		Apr. 25–May 5				2 broods
Barn swallow	sr	ab	Apr. 15	Sept	yes		c		sr	unc				Apr. 10				May 20, 2 broods
Tree swallow	sr	ab	Apr. 15	Sept	yes		very c		sr	beyond outskirts				Apr. 5			Oct. 15	yes
Bank swallow	sr	ab	May 5	Sept. 15			fc			undoubtedly occurs		sr		Apr. 25				May 25
Rough-winged swallow		rare																
Bohemian waxwing												wv	rare					
Cedar waxwing	res, wr	c			yes, July, Aug	sr	c	yes	sr	fc	June 15	sr, res	c, oc					
Northern shrike	wv		Mar. 15	Nov		wv	fc					wv	unc					
Migrant shrike	sr	fc	Mar. 25, Apr. 1	Oct	yes	sr	fc							Mar				Apr., July, 2 broods
Red-eyed vireo	sr	ab	May 10		yes		c		sr	c		sr	ab					May 18–30
Philadelphia vireo	tv												oc					
Warbling vireo	sr		May 10		yes		unc, local		sr	in villages		sr						yes
Yellow-throated vireo	sr	c	May 10		yes		fc	yes	sr	on outskirts				Apr. 25				
Blue-headed vireo	tv	fc	Apr. 25				c	yes	sr	fc, up to 2700 ft	June 5	tv		May				
Plumbeous vireo																		
White-eyed vireo		rare							sr	beyond outskirts		sr	oc					yes
Black and white warbler	tv	unc	Apr. 30	Sept			unc	yes	sr	fc		sr						
Prothonotary warbler																		
Worm-eating warbler	tv	not rare											unc					
Blue-winged warbler		rare																
Golden-winged warbler		rare										sr		May 10			Sept	
Lawrence warbler																		
Brewster warbler																		
Nashville warbler	tv	fc	May, early				once, 19 Oct. '79			oc		tv	c	May 5				
Orange-crowned warbler																		
Tennessee warbler	tv	fc		Sept. 18			not rare, local	yes										
Southern parula warbler																		
Northern parula warbler	sr	c	May 15	Sept. 20		sr	fc		sr	up to 2700 ft		sr						
Cape May warbler	tv	unc					twice, 27 May '83					tv	oc	May 10				
Yellow warbler	sr	ab	Apr. 30, May 5	Sept. 30	yes		not very c	yes	sr	valleys		sr		Apr. 25–May 5				
Black-throated blue warbler	tv	c	May 10	Oct		sr	c	yes	sr	c	June 8	tv	ab					
Myrtle warbler	tv	ab	Apr. 25	Oct			ab	yes	sr	Slide mt		tv	c	Apr. 22				
Magnolia warbler	tv	c	May 18			sr	m	yes	sr	c	June 12			May 18				
Cerulean warbler	sr	fc	May 8, 10	Sept	yes							sr	c					
Chestnut-sided warbler	sr	fc	May 10	Sept			c	yes	sr	c	May 25, June 10	sr	c					May 20–June 10
Bay-breasted warbler	tv	fc	May 10, 18	Sept. 30		tv	rather rare					tv	c at times	May 10				
Black-poll warbler	tv	c	May 18	Sept. 30			once, 23 May '77		sr	Slide mt		tv		May 15				
Blackburnian warbler	(tv ?)	c	May 5	Sept. 30		sr	c		sr	unc		tv	ab	May 11				
Yellow-throated warbler																		
Black-throated green warbler	tv	ab	Apr. 30, May 5	Sept. 30			c	yes	sr	fc		sr	ab, local	May 7				
Pine warbler	tv	c					once, 8 May '77		oc									
Palm warbler	tv	unc	Apr. 20				once, 13 Oct. '79											
Yellow palm warbler																		
Prairie warbler																		
Ovenbird	sr	c	May 10	Sept. 15	yes	sr	c		sr	fc		sr	c					May 20–June 10
Water-thrush	tv	c	May 1	Sept. 30		sr	rather rare	yes	sr	unc				Apr. 30				
Grinnell water-thrush																		
Louisiana water-thrush							local		sr	fc, valleys								
Kentucky warbler																		
Connecticut warbler	tv	very rare		Sept. 7, 17														
Mourning warbler	sr	unc	May 10	Sept	yes	sr	c	yes	sr	c, upper valleys	yes	sr	c					
Northern yellow-throat	sr	c	May 15	Sept. 20	yes	sr	fc		sr	fc, valleys		sr						
Yellow-breasted chat	sv	rare																May 25–June 15
Hooded warbler	sr	c, local		Sept	yes		once, 9 Sept. '78					sr	c	May 10				
Wilson warbler	tv	(fc)	May 17	Sept. 17		tv	rare					tv	c at times	May 15				
Canadian warbler	tv	c	May 10	Sept. 20			ab	yes	si	fc	yes	sr	ab in swamps					
American redstart	sr	c	May 5	Sept	yes	sr	c		sr	fc, valleys		sr	c					
American pipit	tv	c	May 14, 18	Oct. 30		tv						tv		May 5			Oct	
Mockingbird																		
Catbird	sr	ab	early May	Oct. 1	yes		local	yes	sr	c, valleys		sr	c	Apr. 30				3 broods
Brown thrasher	sr	irreg					local		sr	unc, valleys		sr						yes
Carolina wren																		
House wren	sr	c	early May	Oct	yes		local	yes	sr	fc		sr						
Winter wren	tv	ab	Apr. 1	Oct. 30	1 record		ab; Apr.–Oct	yes	sr	c, valleys, mts		sr	local				Sept	
Short-billed marsh wren	sr	(fc)			yes		once, 27 Oct '77	(?)				sr	local	May			Oct	
Long-billed marsh wren	sr	ab	early Apr	Nov. 1	yes		local	yes	sr	beyond outskirts		sr	c, local	May				
Brown creeper	res, tv	—, ab				sr	fc	yes	sr	Slide mt		res						
White-breasted nuthatch	res	ab			yes		not c	yes		unc, valleys		res		Apr	May 5	Sept	Oct	
Red-breasted nuthatch	tv	c	Apr. 1	Oct., Dec. 18			ab	yes	sr	3000 ft								
Brown-headed nuthatch																		
Tufted titmouse																		
Chickadee	res	ab			yes		c	yes	res	c		res	c					
Carolina chickadee																		
Hudsonian chickadee																		
Golden-crowned kinglet	tv, wv	ab, oc	Apr. 15	Nov. 1		wv	rare	(?)						Mar	Apr. 30			
Ruby-crowned kinglet	tv	c	early Apr	early Oct		tv	c	(?)		unc, Slide mt		tv		Apr	May 1	Oct		
Blue-gray gnatcatcher		rare				tv						tv						
Townsend solitaire																		May 20–June 10
Wood thrush	sr	c	Apr. 27, May 5	Oct. 1														
Wilson thrush	sr	c	early May	Sept. 1	yes		rare	yes	sr	fc, up to 2500 ft	June 15	sr		May 5			Sept. 5	
Gray-cheeked thrush	tv	c	early May	Sept. 1, Oct. 1	yes		c, locally	yes	sr	c, up to 2000 ft	June 8	sr	ab					
Bicknell thrush						tv	June 1											
Olive-backed thrush	tv	c	early May	Sept. 1, Oct. 1			once, 24 May '78		sr	c, Slide mt								
Hermit thrush	tv	ab	early Apr	Oct. 15		sr	fc	yes	sr	fc, mts		sr	rare	Apr. 10		Oct		
American robin	sr, wv	ab, oc				sr	ab		sr	fc, mts		tv		Mar. 3				
Varied thrush					yes	sr	ab in fall	yes	sr	c	May 13	sr	ab					
Wheatear																		
Bluebird	sr	ab	early Mar	Nov. 15	yes		local	yes	sr	ab; fc, valleys	June 9	sr	c	Mar. 3				

SPECIES RECORDED	EDSON, CHAUTAUQUA COUNTY, 1886					BARNUM, ONONDAGA COUNTY, 1886			
	Resident or transient	Common or rare	Arrives from south	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Breeds
Rose-breasted grosbeak	sr	fc	May 10			sr	fc		yes
Blue grosbeak									
Indigo bunting	sr	c	May 10			sr	ab		yes
Painted bunting									
Dickcissel									
Lark bunting									
Louisiana tanager									
Scarlet tanager	sr	unc	May 3			sr	c		yes
Summer tanager									
Purple martin	sr	fc	May 1		yes	sr	c		yes
Cliff swallow	sr	c	Apr. 15		yes	sr	ab		yes
Barn swallow	sr	ab	Apr. 15		yes	sr	ab		yes
Tree swallow	sr	local, c	Apr. 15		yes	sr	c	Mar. 29	yes
Bank swallow	sr	fc	Apr. 15			sr	ab	Apr. 26	yes
Rough-winged swallow									
Bohemian waxwing									
Cedar waxwing	sr		Mar			res	c	Feb. 24	yes
Northern shrike	tv, wr	fc, oc				wv	c		
Migrant shrike						sr	c	Apr. 12	yes
Red-eyed vireo	sr	c	May			sr	c		yes
Philadelphia vireo						tv	fc		
Warbling vireo	sr	c	May			tv			yes
Yellow-throated vireo	tv, sr	unc, rare	May			tv	fc		
Blue-headed vireo	tv	rare	May						
Plumbeous vireo									
White-eyed vireo	sr	rare	May			tv	fc		
Black and white warbler	tv				yes	tv	fc		yes, oc
Prothonotary warbler									
Worm-eating warbler									
Blue-winged warbler									
Golden-winged warbler						av	rare	May '79	
Lawrence warbler									
Brewster warbler									
Nashville warbler						tv	c		
Orange-crowned warbler									
Tennessee warbler									
Southern parula warbler									
Northern parula warbler		rare	spring			tv	fc		yes
Cape May warbler						tv	fc		
Yellow warbler	sr		May 1		yes	sr	ab		yes
Black-throated blue warbler	tv	fc	May			tv	c		yes, oc
Myrtle warbler	tv	c	early spring	late autumn		tv	ab	May 3	
Magnolia warbler	tv, sr	c, rare	May 11		once	tv	fc		
Cerulean warbler						tv	fc		yes
Chestnut-sided warbler	sr	c	May			tv	c		
Bay-breasted warbler						tv	fc		
Black-poll warbler						tv	fc		
Blackburnian warbler	tv, sr	c, rare	early May		yes	tv	ab		
Yellow-throated warbler									
Black-throated green warbler	tv, sr	c, oc	May 5–14			tv	c	May 3	
Pine warbler		once				tv	fc		
Palm warbler						av	rare		
Yellow palm warbler									
Prairie warbler									
Ovenbird	sr	c	Apr. 29			sr	c	May 3	yes
Water-thrush	tv	unc				tv, sr	fc		yes
Grinnell water-thrush									
Louisiana water-thrush						sr	ab, spring	Apr. 26	yes, sparin
Kentucky warbler									
Connecticut warbler		2 or 3				tv	very rare		
Mourning warbler		rare				tv, sr	fc		yes
Northern yellow-throat						sr	fc		yes
Yellow-breasted chat									
Hooded warbler	sr	fc				tv	fc		
Wilson warbler	tv	unc				tv			
Canadian warbler	tv, res	c, oc	May			tv	fc		
American redstart	sr	c				sr	c		yes
American pipit						tv	c		
Mockingbird									
Catbird	sr	c	Apr. 29, May 1			sr	c		yes
Brown thrasher	sr	oc				sr	c	May 3	yes
Carolina wren									
House wren		c	Apr. 15			sr	c		yes
Winter wren		rare				tv	fc	Apr. 29	
Short-billed marsh wren						sr	rare		yes
Long-billed marsh wren		c, local				sr	ab		yes
Brown creeper	tv	unc				tv, res ?	c	Mar. 15	
White-breasted nuthatch	wv	c				res	ab		yes
Red-breasted nuthatch	tv	rare				tv	c		
Brown-headed nuthatch									
Tufted titmouse									
Chickadee	res	c				res	ab		yes
Carolina chickadee									
Hudsonian chickadee									
Golden-crowned kinglet						tv	ab	Apr. 14	
Ruby-crowned kinglet	tv		Apr	Oct		tv	c		
Blue-gray gnatcatcher						av			
Townsend solitaire									
Wood thrush		unc				sr	c	May 5	yes
Wilson thrush						sr	c		yes
Gray-cheeked thrush						tv	rare		
Bicknell thrush									
Olive-backed thrush		rare				tv			
Hermit thrush	sr	c	Apr			tv	Apr. 14		
American robin	sr	ab	Feb. or Mar			sr	ab	Mar. 15	yes
Varied thrush									
Wheatear									
Bluebird	sr	c	Feb. or Mar			sr	c	Mar. 15	yes

	RALPH AND BAGG, ONEIDA COUNTY, 1886–1900					DAVISON, NIAGARA COUNTY, 1889			BERGTOLD, BUFFALO AND VICINITY		
ent ent	Common or rare	Arrives from south	Leaves for north	Departs for south	Breeds	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Breeds
	c				yes		c	yes		fc	yes
	c				yes		c	yes		fc	yes
	c				yes		unc	yes		fc	yes
	fc formerly	now rare			yes		c	yes		fc	yes
	ab				yes		c	yes		c	yes
	ab				yes		c	yes		c	yes
	c				yes		c	yes		fc	yes
	ab				yes		c	yes		ab	yes
	oc				yes		c	yes		once	
	oc					wv	rare		wv	rare	
	c, oc				yes		c	yes	res	ab	yes
	fc					wr	c		wv	oc	
	fc				yes		c	yes		oc	yes
	c				yes		c	yes		c	yes
	oc			Sept. 14		tv	rare		tv	rare	
	c				May 27, June 12		unc	yes		c	yes
	fc				May 24		unc	yes	tv	oc	
ake.	oc			Sept. 26		tv	c		tv	rare	
	once, Peterboro									c	
							unc	yes	tv	rare	
	fc					tv	c	(?)	tv	c	yes
									tv	rare	
						tv	rare				
						tv	rare, 21 July '89		tv	rare	
						tv	rare		tv	rare	
	fc, oc				yes	tv	rare		tv	c	
	once			16 Sept. '80							
	oc, spring			30 Sept. '79		tv	rare				
	c				yes	tv	c		tv	oc	
	rare					tv	rare		tv	rare	
	ab				yes		c	yes		c	yes
	local, fc				yes	tv	c		tv	c	yes
	ab				Ad. mts	tv	c			ab	yes
	c				yes	tv	c		tv	c	yes, local
	c, local	9 May, '90					unc	June 8, 23	tv	oc	yes
	fc				yes	tv	c		tv	fc	yes
	fc					tv	c		tv	oc	
	ab					tv	c		tv	c	
	fc, oc					tv	c		tv	fc	
	c, fc				yes	tv	c	few	tv	c	yes
	once	8 May '77			June 11				tv	oc	
	oc	May 3, 9		Oct. 5					tv	rare	
						tv	rare				
	c				yes		c	yes		c	yes
	oc,					tv	rare			oc	yes
						tv	rare				
	twice			Sept. 8, 18		tv	rare				
	unc						unc	15 June '91	tv	rare	yes
	c				yes	tv	c			oc	yes
	rare				yes					once	
										oc	yes
	oc					tv	rare			rare	
	ab, c				yes	tv	c		tv	c	yes
	c				yes		c	yes		c	yes
	fc					tv	unc		tv	oc	
	ab				yes		c	yes		c	yes
	c, local				yes		c	yes		fc	yes
	unc	none since 1887	returned in 1893		yes		c	yes		c	yes
	fc				June 28	tv	rare		tv	oc	yes
	rare				yes (?)					fc	yes
	ab, Seneca river				yes		unc	yes		fc	yes
	fc				Ad. mts	tv	c		tv	ab	yes
	c				yes		c	yes	res	ab	yes
	c, oc				May 14, Ad. mts	tv	unc		tv	oc	yes
										rare	
	ab				yes	wr	c		res	ab	yes
	local, Ad. mts										
	c, oc					tv	c		tv	ab	
	c					tv	c		tv	c	
										rare	
	fc				yes		c	yes		c	yes
	ab				yes		c	yes		c	yes
	c					tv	rare				
	once	24 May '73									
	fc, ab in Ad. mts				June 13	tv	unc		tv	oc	
	c, ab				yes	tv	c			fc	yes
	ab, oc				yes		c	yes	res	ab	yes
	ab				yes		c	yes		ab	yes

SPECIES RECORDED	EDSON, CHAUTAUQUA COUNTY, 1886					BARNUM, ONONDAGA COUNTY, 1886			
	Resident or transient	Common or rare	Arrives from south	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Breeds
Rose-breasted grosbeak	sr	fc	May 10			sr	fc		yes
Blue grosbeak									
Indigo bunting	sr	c	May 10			sr	ab		yes
Painted bunting									
Dickcissel									
Lark bunting									
Louisiana tanager									
Scarlet tanager	sr	unc	May 3			sr	c		yes
Summer tanager									
Purple martin	sr	fc	May 1		yes	sr	c		yes
Cliff swallow	sr	c	Apr 15		yes	sr	ab		yes
Barn swallow	sr	ab	Apr 15		yes	sr	ab		yes
Tree swallow	sr	local, c	Apr 15		yes	sr	c	Mar. 20	yes
Bank swallow	sr	fc	Apr. 15			sr	ab	Apr. 20	yes
Rough winged swallow									
Bohemian waxwing									
Cedar waxwing	sr		Mar			res	c	Feb 24	yes
Northern shrike	tv, wr	fc, oc				wv			
Migrant shrike						sr	c	Apr. 12	yes
Red-eyed vireo	sr	c	May			sr	c		yes
Philadelphia vireo						tv	fc		
Warbling vireo	sr	c	May			tv			yes
Yellow-throated vireo	tv, sr	unc, rare	May			tv	fc		
Blue-headed vireo	tv	rare	May						
Plumbeous vireo									
White-eyed vireo	sr	rare	May			tv	fc		
Black and white warbler	tv				yes	tv	fc		yes, oc
Prothonotary warbler									
Worm-eating warbler									
Blue-winged warbler									
Golden-winged warbler						ay	rare	May '79	
Lawrence warbler									
Brewster warbler									
Nashville warbler						tv	c		
Orange-crowned warbler									
Tennessee warbler									
Southern parula warbler									
Northern parula warbler		rare	spring			tv	fc		yes
Cape May warbler						tv	fc		
Yellow warbler	sr		May 1		yes	sr	ab		yes
Black-throated blue warbler	tv	fc	May			tv	c		yes, oc
Myrtle warbler	tv	c	early spring	late autumn		tv	ab	May 3	
Magnolia warbler	tv, sr	c, rare	May 11		once	tv	fc		
Cerulean warbler						tv	fc		yes
Chestnut-sided warbler	sr	c	May			tv	c		
Bay-breasted warbler						tv	fc		
Black-poll warbler						tv	fc		
Blackburnian warbler	tv, sr	c, rare	early May		yes	tv	ab		
Yellow-throated warbler									
Black-throated green warbler	tv, sr	c, oc	May 5–14			tv	c	May 3	
Pine warbler		once				tv	fc		
Palm warbler						av	rare		
Yellow palm warbler									
Prairie warbler									
Ovenbird	sr	c	Apr. 29			sr	c	May 3	yes
Water-thrush	tv	unc				tv, sr	fc		yes
Grinnell water-thrush									
Louisiana water-thrush						sr	ab, spring	Apr 26	yes, sparingly
Kentucky warbler									
Connecticut warbler		2 or 3				tv	very rare		
Mourning warbler		rare				tv, sr	fc		yes
Northern yellow-throat						sr	fc		yes
Yellow-breasted chat									
Hooded warbler	sr	fc				tv	fc		
Wilson warbler	tv	unc				tv			
Canadian warbler	tv, res	c, oc	May			tv	fc		
American redstart	sr	c				sr	c		yes
American pipit						tv	c		
Mockingbird									
Catbird	sr	c	Apr. 29, May 1			sr	c		yes
Brown thrasher	sr	oc				sr	c	May 3	yes
Carolina wren									
House wren		c	Apr. 15			sr	c		yes
Winter wren		rare				tv	fc	Apr. 29	
Short-billed marsh wren						sr	rare		yes
Long-billed marsh wren		c, local				sr	ab		yes
Brown creeper	tv	unc				tv, res ?	c	Mar. 15	
White-breasted nuthatch	wv	c				res	ab		yes
Red-breasted nuthatch	tv	rare				tv	c		
Brown-headed nuthatch									
Tufted titmouse									
Chickadee	res	c				res	ab		yes
Carolina chickadee									
Hudsonian chickadee									
Golden-crowned kinglet						tv	ab	Apr. 14	
Ruby-crowned kinglet	tv		Apr	Oct		tv	c		
Blue-gray gnatcatcher						av			
Townsend solitaire									
Wood thrush		unc				sr	c	May 5	yes
Wilson thrush						sr	c		yes
Gray-cheeked thrush						tv	rare		
Bicknell thrush									
Olive-backed thrush		rare				tv			
Hermit thrush	sr	c	Apr			sr	ab	Apr. 14	
American robin	sr	ab	Feb. or Mar			sr	ab	Mar 15	yes
Varied thrush									
Wheatear									
Bluebird	sr	c	Feb. or Mar			sr	c	Mar. 15	yes

SPECIES RECORDED	RALPH AND BAGG, ONEIDA COUNTY, 1886–1900						DAVISON, NIAGARA COUNTY, 1889			BERGTOLD, BUFFALO AND VICINITY		
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Departs for south	Breeds	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Breeds
Rose-breasted grosbeak	sr	c				yes					fc	yes
Blue grosbeak									yes			
Indigo bunting	sr	c				yes		c	yes		fc	yes
Painted bunting												
Dickcissel												
Lark bunting												
Louisiana tanager												
Scarlet tanager	sr	c				yes		unc	yes		fc	yes
Summer tanager												
Purple martin	sr	fc formerly	now rare			yes	wv	rare		wv	rare	
Cliff swallow	sr	ab				yes		c	yes	res	ab	yes
Barn swallow	sr	ab				yes		c	yes	wv	c	
Tree swallow	sr	c				yes		c	yes		fc	yes
Bank swallow	sr	ab				yes		c	yes		ab	yes
Rough winged swallow		oc				yes		c	yes		once	
Bohemian waxwing	wv	oc					wr	rare		wv	rare	
Cedar waxwing	sr, wv	c, oc				yes		c	yes	res	ab	yes
Northern shrike	wv	fc					wr	c		wv	oc	
Migrant shrike	sr	fc				yes		c	yes		oc	yes
Red-eyed vireo	sr	c				yes		c			c	yes
Philadelphia vireo		oc			Sept. 14		tv	rare		tv	rare	
Warbling vireo	sr	c				May 27 June 12		unc	yes		c	yes
Yellow-throated vireo	sr	fc				May 24		unc	yes	tv	oc	
Blue-headed vireo	sr, Joe's lake	oc			Sept 26		tv	c		tv	rare	
Plumbeous vireo		once, Peterboro									c	
White-eyed vireo								unc	yes	tv	rare	
Black and white warbler	sr	fc				yes, oc	tv	c	(?)	tv	c	yes
Prothonotary warbler										tv	rare	
Worm-eating warbler							tv	rare				
Blue-winged warbler							tv	rare, 21 July '89		tv	rare	
Golden-winged warbler							tv	rare		tv	rare	
Lawrence warbler												
Brewster warbler												
Nashville warbler	tv, sr	fc, oc				yes	tv	rare		tv	c	
Orange-crowned warbler		once			16 Sept. '89							
Tennessee warbler	tv	oc, spring			30 Sept '79		tv	rare				
Southern parula warbler												
Northern parula warbler	sr	c				yes	tv	c		tv	oc	
Cape May warbler	tv	rare					tv	rare		tv	rare	
Yellow warbler	sr	ab				yes		c	yes		c	yes
Black-throated blue warbler	sr, tv	local, fc				yes	tv	c		tv	c	yes
Myrtle warbler	tv	ab				Ad mts	tv	c			ab	yes
Magnolia warbler	tv	c				yes	tv	c		tv	c	yes, local
Cerulean warbler	sr	c, local	9 May, '90					unc	June 8, 23	tv	oc	yes
Chestnut-sided warbler	sr	fc				yes	tv	c		tv	fc	yes
Bay-breasted warbler		fc					tv	c		tv	oc	
Black-poll warbler	tv	ab					tv	c		tv	c	
Blackburnian warbler	tv, sr	fc, oc					tv	c		tv	fc	
Yellow-throated warbler												
Black-throated green warbler	tv, sr	c, fc				yes	tv	c	few	tv	c	yes
Pine warbler	sr, local	once	8 May '77			June 11				tv	oc	
Palm warbler	tv	oc	May 3, 9		Oct 5					tv	rare	
Yellow palm warbler							tv	rare				
Prairie warbler												
Ovenbird	sr	c				yes		c	yes		c	yes
Water-thrush	tv, sr	oc					tv	rare			oc	yes
Grinnell water-thrush												
Louisiana water-thrush	sr, local											
Kentucky warbler							tv	rare				
Connecticut warbler		twice			Sept 8, 18		tv	rare				
Mourning warbler	sr	unc				yes		unc	15 June '91	tv	rare	yes
Northern yellow-throat	sr	c				yes	tv	c			oc	yes
Yellow-breasted chat	sr	rare				yes					once	
Hooded warbler	sr, local										oc	yes
Wilson warbler	tv	oc					tv	rare			rare	
Canadian warbler	tv, sr	ab, c				yes	tv	c		tv	c	yes
American redstart	sr	c				yes		c	yes		c	yes
American pipit	tv	fc					tv	unc		tv	oc	
Mockingbird												
Catbird	sr	ab				yes		c	yes		fc	yes
Brown thrasher	sr	c, local				yes		c	yes		fc	yes
Carolina wren												
House wren	sr	unc	none since 1887, returned in 1893			yes		c	yes		c	yes
Winter wren		fc					tv	rare		tv	oc	yes
Short-billed marsh wren		rare				yes (?)					fc	yes
Long-billed marsh wren						yes		unc	yes		fc	yes
Brown creeper		ab, Seneca river				Ad mts	tv	c		tv	ab	yes
White-breasted nuthatch	tv	fc				yes		c	yes	res	ab	yes
Red-breasted nuthatch	res	c				May 14, Ad. mts	tv	unc		tv	oc	yes
Brown-headed nuthatch	tv, sr	c, oc										
Tufted titmouse											rare	
Chickadee	res	ab				yes	wr	c		res	ab	yes
Carolina chickadee												
Hudsonian chickadee												
Golden-crowned kinglet	tv, res	local, Ad. mts					tv	c		tv	ab	
Ruby-crowned kinglet	tv	c, oc					tv	c		tv	c	
Blue-gray gnatcatcher		c									rare	
Townsend solitaire												
Wood thrush	sr	fc				yes		c	yes		c	yes
Wilson thrush	sr	ab				yes		c	yes		c	yes
Gray-cheeked thrush	tv	c					tv	rare				
Bicknell thrush												
Olive-backed thrush	tv, sr	once	24 May '75			June 13	tv	unc		tv	oc	
Hermit thrush	sr, tv	fc, ab in Ad. mts				yes	tv	c			fc	yes
American robin	sr, wv	c, ab				yes		c	yes	res	ab	yes
Varied thrush		ab, oc										
Wheatear												
Bluebird	sr	ab				yes		c	yes		ab	yes

SPECIES RECORDED	GREGG, CHEMUNG COUNTY, 1891					CHAPMAN, NEW YORK			
	Resident or transient	Common or rare	Arrives from south	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north
Rose-breasted grosbeak	sr	unc				sr	c	May 1-10	
Blue grosbeak						av	4 times		
Indigo bunting	sr				yes	sr	c	May 1-10	
Painted bunting						av			
Dickcissel	sr					av, sr	rare, formerly		
Lark bunting									
Louisiana tanager						av	once		
Scarlet tanager	sv	c				sr	c	May 1-10	
Summer tanager						sv	rare		
Purple martin	sr					sr	unc	Apr. 20-30	
Cliff swallow	sv	c				sr, tv	unc, c	Apr. 20-30	
Barn swallow		ab				sr, tv	c, ab	Apr. 10-20	
Tree swallow	sv	c				sr, tv	rare, ab	Apr. 1-10	
Bank swallow	sr	c				sr	ab	Apr. 20-30	
Rough-winged swallow						sr	c, local	Apr. 20-30	
Bohemian waxwing						wv	very rare		
Cedar waxwing	res	c				wr, sr	fc, c		
Northern shrike	wr					wr	unc		Mar. 1-31
Migrant shrike						tv, sr	very rare, once		
Red-eyed vireo	sr	c			yes	sr	ab	May 1-10	
Philadelphia vireo						tv	very rare		
Warbling vireo		ab				sr	c, local	May 1-10	
Yellow-throated vireo	sr	ab				sr	c	May 1-10	
Blue-headed vireo	sr	ab				tv	fc	Apr. 20-30	May 10-20
Plumbeous vireo									
White-eyed vireo						sr	c	May 1-10	
Black and white warbler		ab	Apr., late			sr, tv	fc, c	Apr. 20-30	
Prothonotary warbler						av	twice		
Worm-eating warbler		unc				sr	rather rare, local	May 10-20	
Blue-winged warbler		once	22 May '67			sr	c	May 1-10	
Golden-winged warbler		once	22 May '67			tv, sr	rather rare, rare	May 10-20	May 15-25
Lawrence warbler						tv, sr	rare, 6		
Brewster warbler						sr	rare		
Nashville warbler		unc				tv, sr	fc, rare	May 1-10	May 20-30
Orange-crowned warbler						tv	rare		
Tennessee warbler		once				tv	rather rare	May 10-20	May 15-25
Southern parula warbler									
Northern parula warbler	sr	c				sr, tv	local, ab	May 1-10	May 20-30
Cape May warbler		once				tv	rare	May 10-20	May 15-25
Yellow warbler	sr	c				sr	c	May 1-10	
Black-throated blue warbler		unc				tv	c	May 1-10	May 15-30
Myrtle warbler		c				tv, wv	ab, local	Apr. 1-10	May 10-20
Magnolia warbler		c	May			tv	c	May 1-10	May 15-30
Cerulean warbler						av	twice		
Chestnut-sided warbler		rare; ab, spring 1867				tv, sr	c; c, local	May 1-10	May 20-30
Bay-breasted warbler		unc				tv	fc, irreg	May 10-20	May 20-30
Black-poll warbler		oc				tv	ab	May 10-20	May 25, June
Blackburnian warbler		ab				tv	unc	May 10-20	May 15-25
Yellow-throated warbler						av	once		
Black-throated green warbler	sr	c				tv, sr	local	Apr. 20-30	May 15-25
Pine warbler	sr	unc			probably	sr	fc, L. I.	Apr. 10-20	May 1-10
Palm warbler						tv	rare		
Yellow palm warbler						tv	c	Apr. 10-20	Apr. 25-May
Prairie warbler						sr	rare	May 1-10	May 20-30
Ovenbird		ab				sr	ab	Apr. 20-30	
Water-thrush						tv	c	May 1-10	May 15-30
Grinnell water-thrush						tv	rare		
Louisiana water-thrush						sr	c	Apr. 10-20	
Kentucky warbler						sr	c, local		
Connecticut warbler						tv	ab, fall		
Mourning warbler		twice	24 May '70			tv	rare	May 20-30	May 30, June
Northern yellow-throat		c				sr	ab	May 1-10	
Yellow-breasted chat		unc				sr	c	May 1-10	
Hooded warbler						sr	c	May 1-10	
Wilson warbler		fc				tv	unc	May 10-20	May 20-30
Canadian warbler		ab				tv	c	May 10-20	May 25-June
American redstart	sr	ab				sr	c	May 1-10	
American pipit	wv	unc				tv	ab	Apr. 1-10	Apr. 15-25
Mockingbird						sr, wv	rare		
Catbird	sr	c				sr	ab	Apr. 20-30	
Brown thrasher	sr	c				sr	c	Apr. 20-30	
Carolina wren						res			
House wren		c				sr	c	Apr. 20-30	
Winter wren	wv					wr	fc		Apr. 1-30
Short-billed marsh wren						sr	c, local	May 10-20	
Long-billed marsh wren		c				sr	ab	May 10-20	
Brown creeper	sr	c				wr	fc		Apr. 1-30
White-breasted nuthatch	res	c				res	c		
Red-breasted nuthatch						tv, wv	c, oc		Oct.
Brown-headed nuthatch									
Tufted titmouse		rare, twice				res	local		
Chickadee	res	c				res	c		
Carolina chickadee						res	N. J.		
Hudsonian chickadee									
Golden-crowned kinglet		occurs				wv	c		Apr. 1-20
Ruby-crowned kinglet		occurs				tv	c	Apr. 10-20	May 1-15
Blue-gray gnatcatcher						sv			
Townsend solitaire						av			
Wood thrush	sr	c		Oct.		sr	ab	Apr. 20-30	
Wilson thrush	sr			early fall		sr	c	May 1-10	
Gray-cheeked thrush						tv	c	May 10-20	May 25-June
Bicknell thrush						tv	rare	May 20-30	?
Olive-backed thrush	sr	ab				tv	c	May 10-20	May 20-June
Hermit thrush		ab				tv, wr	ab, unc	Apr. 1-10	Apr. 25, May
American robin	res					sr, wr	ab, unc	Feb. 15—Mar 10	
Varied thrush						av			
Wheatear						av	twice, L. I.		
Bluebird		ab	Mar.	late autumn		sr, tv, wr	c, ab, fc	Feb. 15-Mar. 10	

, 1894			SHORT, WESTERN NEW YORK, 1896			FISHER, SING SING, 1898					
ns n h	Departs for south	Breeds	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south
	Sept. 20-30	May 20	sr	c	yes	sr	fc	May 3			Oct. 1
	Oct. 1-10	May 29	sr	c	yes	sr	c	May 4			Oct. 17
	Oct. 1-10	June 3	sr		yes	sr	c	May 4			Oct. 9
	Sept. 20-30	May 25	sr	rare	yes	sr	fc	Apr. 27			Sept. 11
	Oct. 1-10	May 30	sr	c	yes	sr	c	May 1			Sept. 12
	Oct. 1-10	May 8	sr	ab	yes	sr	c	Apr. 15			Sept. 22
	Oct. 20-31	May 19	sr	fc	yes	tv	c	Apr. 4	May 26	Aug. 4	Oct. 16
	Oct. 1-10	May 19	sr	ab	yes	sr	c	Apr. 18			Oct. 1
	Sept. 1-10	May 30	sr		yes	sr	c	Apr. 17			Aug. 12
			wv	oc							
		June 19	sr, res	c, oc	yes	res	c				
31			wv	oc		wv	fc		Apr. 17	Oct. 26	
			sr	c	yes	av					
	Oct. 10-20	May 28	sr	c	yes	sr	c	Apr. 29			Oct. 19
20	Sept. 20-30		tv	oc	yes (?)	tv	rare	Sept. 20			Oct. 20
	Sept. 20-30	May 30	sr	c	yes	sr	fc	May 3			Sept. 18
	Sept. 20-30	May 28	sr	fc	yes	sr	fc	Apr. 30			Sept 7
20	Oct. 15-25		tv	rare		tv	fc	Apr. 23	May 14	Sept. 8	Oct. 20
	Oct. 1-10	May 25				sr	c	Apr. 29			Oct. 3
	Oct. 1-10	May 18	tv			sr	c	Apr. 18			Oct. 1
	Sept. 1-10	May 20	tv	oc	(?)	sr	c	May 7			Aug. 23
	Sept. 1-10	May 16	tv	oc, 21 July '89		sr	c	May 4			Sept. 7
		May 30	sr		yes	sr	rare	May 8			Aug. 25
31	Sept. 25-Oct. 5		tv, sr	c, rare	yes	tv, breeds?	fc	May 7	May 27	Aug. 11	Oct. 4
						av					
31	Sept. 25-Oct. 5		tv, sr	oc, rare	yes	tv	rare	May 22	May 27	Aug. 22	Oct. 2
31	Oct. 15-25	May 22	sr	rare	yes	tv	c	May 2	May 28	Sept. 21	Oct. 7
31	Sept. 25-Oct. 5		tv	rare		tv	fc			Aug. 20	Oct. 1
	Sept. 10-20	May 20	sr	ab	yes	sr	c	Apr. 30			Sept. 27
31	Oct. 15-25		tv	c		tv	c	Apr. 25	May 28	Aug. 26	Oct. 10
			tv	c		tv, wv	c, oc	Apr. 13	May 28	Aug. 16	Nov. 11
31	Oct. 10-20		tv, sr	c, rare	yes	tv	c	May 9	May 28	Aug. 13	Oct. 11
			sr	unc	yes						
5	Sept. 30-Oct. 10	May 29	sr	unc	yes	sr	fc	May 2			Sept. 24
			tv	c		tv	fc	May 14	May 28	Aug. 5	Sept. 26
0	Oct. 15-25		tv	c		tv	c	May 7	June 6	Aug. 30	Oct. 16
31	Sept. 20-30		tv	c		tv	c	May 10	May 29	Aug. 15	Oct. 15
31	Oct. 15-25		tv	c	(?)	tv, sr	c, unc	Apr. 30	June 3	Sept. 1	Oct. 26
		L. I., yes	tv	very rare		tv	oc				
			tv	rare		tv	rare	Apr. 29		Sept. 30	Oct. 12
-30	Oct. 15-30					tv	fc	Apr. 11	May 5	Sept. 20	Nov. 8
		May 30				sr	rare	May 2			Sept. 14
	Oct. 1-10	May 20	sr		yes	sr	c	Apr. 27			Oct. 10
5	Sept. 25-Oct. 5		sr	unc	yes	tv	fc	May 11	May 21	July 28	Oct. 3
	Sept. 20-30	May 11				sr	c	Apr. 9			Aug. 24
		June 1		twice, May '94, 24 May '01		sr	c	May 2			Aug. 27
0	Sept. 20-30		tv	rare, Aug. '93		tv	rare			Aug. 26	Oct. 9
			tv, sr			tv	rare	May 28	May 29	Aug. 18	Oct. 1
	Oct. 10-20	May 25	sr		yes	sr	c	Apr. 28			Oct. 23
	Sept. 10-20	May 23	sr	rare	26 May '90	sr	c	Apr. 28			Aug. 29
	Sept. 20-30	May 15	sr		yes	sr	rare				Sept. 1
31	Sept. 20-30		tv	rare		tv	fc	May 9	May 30	Aug. 10	Sept. 9
5	Sept. 20-30		tv, sr (?)			tv	c	May 6	June 2	Aug. 10	Oct. 11
	Oct. 1-10	May 17	sr	ab	yes	sr	c	May 1			Oct. 3
	Oct. 25-Nov. 5		tv	irreg		tv	c	Mar. 26	(?)	Sept. 24	Nov. 16
		yes	sv	rare	yes (?)						
	Oct. 10-20	May 17	sr	ab	yes	sr	c	Apr. 28			Oct. 25
	Oct. 10-20	May 16	sr	rare	yes	sr	c	Apr. 22			Oct. 28
		Mar. 28	av	very rare, 22 Dec. '94							
	Oct. 10-20	May 18	sr		yes	sr	c	Apr. 23			Oct. 14
30			tv	unc		wv	fc		Apr. 27	Sept. 18	
	Oct. 10-20	June 7	sr		yes, local	sr	rare				Oct. 16
	Oct. 10-20	May 31	sr	c	yes	sr	c	May 10			Oct. 28
30			tv, wv	c, oc		wv	fc		May 7	Sept. 20	
		Apr. 17	res	c	yes	res	c				
			wv	oc		wv	irreg		May 8	Aug. 8	
		Staten Island May 22									
		May 19	res	c	yes	res	fc				
30			tv, wv (?)	c		wv	c		Apr. 28	Sept. 20	
30	Oct. 20-30		tv	c		tv	c	Apr. 8	May 13	Sept. 16	Nov. 3
			sr	very rare	yes, once						
	Oct. 1-10	May 17	sr	c	yes	sr	c	Apr. 30			Oct. 2
	Sept. 20-30	May 20	sr	c	yes	sr	c	Apr. 29			Sept. 5
30	Oct. 15-25		tv	unc		tv	fc	May 15	June 1	Sept. 29	Oct. 17
20	Oct. 1-10										
20	Oct. 1-10		tv	oc	yes, rare	tv	fc	May 2	May 30	Sept. 19	Oct. 22
	Nov. 1-30	L. I., probably	tv	c	yes, rare	tv	c	Apr. 5	May 9	Oct. 18	Nov. 26
	Nov. 1-30	Apr. 20	sr	ab	yes	sr, wv	c, oc	Mar. 4			Oct. 30
	Nov. 1-30	Apr. 10	sr	ab	yes	res	c				

SPECIES RECORDED	GREGG, CHEMUNG COUNTY, 1891					CHAPMAN, NEW YORK AND VICINITY, 1894							SHORT, WESTERN NEW YORK, 1896			FISHER, SING SING, 1898					
	Resident or transient	Common or rare	Arrives from south	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south
Rose-breasted grosbeak	sr	unc				sr	c	May 1-10			Sept. 20-30	May 20	sr	c	yes	sr	fc	May 1			Oct 1
Blue grosbeak						av	4 times														
Indigo bunting	sr				yes	sr	c	May 1-10			Oct 1-10	May 29	sr	c	yes	sr	c	May 4			Oct 17
Painted bunting						av															
Dickcissel	sr					av, sr	rare, formerly														
Lark bunting																					
Louisiana tanager						av	once														
Scarlet tanager	sv	c				sr	c	May 1-10			Oct 1-10	June 3	sr		yes	sr	c	May 4			Oct 9
Summer tanager						sv	rare														
Purple martin	sr					sr	unc	Apr. 20-30			Sept. 20 30	May 25	sr	rare	yes	sr	fc	Apr. 27			Sept 11
Cliff swallow	sv	c				sr, tv	unc, c	Apr. 20-30			Oct 1 10	May 30	sr	c	yes	sr	c	May 1			Sept 12
Barn swallow		ab				sr, tv	c, ab	Apr. 10-20			Oct. 1-10	May 8	sr	ab	yes	sr	c	Apr. 15			Sept 22
Tree swallow	sv	c				sr, tv	rare, ab	Apr. 1-10			Oct 20-31	May 19	sr	fc	yes	tv	c	Apr. 4	May 26	Aug. 4	Oct 16
Bank swallow	sr	c				sr	ab	Apr. 20-30			Oct. 1-10	May 19	sr	ab	yes	sr	c	Apr. 18			Oct 1
Rough-winged swallow						sr	c, local	Apr. 20-30			Sept. 1-10	May 30	sr		yes	sr	c	Apr. 17			Aug 12
Bohemian waxwing						wv	very rare						wv	oc							
Cedar waxwing	res	c				sr, sr	fc, c					June 19	sr, res	c, oc	yes	res	c				
Northern shrike	wr					wr	unc		Mar. 1-31	Oct. 20-31			wv	oc		wv	fc		Apr. 17	Oct 26	
Migrant shrike						tv, sr	very rare, once						sr	c	yes	av					
Red-eyed vireo	sr	c			yes	sr	ab	May 1-10			Oct. 10-20	May 28	sr	c	yes	sr	c	Apr 29			Oct 19
Philadelphia vireo						tv	very rare			Sept 10-20	Sept. 20-30		tv	oc	yes (?)	tv	rare	Sept 20			Oct 20
Warbling vireo		ab				sr	c, local	May 1-10			Sept. 20-30	May 30	sr	c	yes	sr	fc	May 3			Sept 18
Yellow-throated vireo	sr	ab				sr	c	May 1-10			Sept 20-30	May 28	sr	fc	yes	sr	fc	Apr. 30			Sept 7
Blue-headed vireo	sr	ab				tv	fc	Apr. 20-30	May 10-20	Sept. 10-20	Oct. 15-25		tv	rare		tv	fc	Apr 23	May 14	Sept 8	Oct 20
Plumbeous vireo																					
White-eyed vireo						sr	c	May 1-10			Oct. 1-10	May 25				sr	c	Apr 29			Oct 3
Black and white warbler		ab	Apr., late			sr, tv	fc, c	Apr. 20-30			Oct. 1-10	May 18	tv			sr	c	Apr. 18			Oct 1
Prothonotary warbler						av	twice														
Worm-eating warbler		unc				sr	rather rare, local	May 10-20			Sept. 1-10	May 20	tv	oc	(?)	sr	c	May 7			Aug 23
Blue-winged warbler		once	22 May '67			sr	c	May 1-10			Sept. 1-10	May 16	tv	oc, 21 July '89		sr	c	May 4			Sept 7
Golden-winged warbler		once	22 May '67			tv, sr	rather rare, rare	May 10-20	May 15-25	Aug		May 30	sr		yes	sr	rare	May 8			Aug 25
Lawrence warbler						tv, sr	rare, 6														
Brewster warbler						sr	rare														
Nashville warbler		unc				tv, sr	fc, rare	May 1-10	May 20-30	Aug. 15-31	Sept. 25-Oct. 5		tv, sr	c, rare	yes	tv, breeds?	fc	May 7	May 27	Aug. 11	Oct 4
Orange crowned warbler						tv	rare									av					
Tennessee warbler		once				tv	rather rare	May 10-20	May 15-25	Aug. 15-31	Sept 25-Oct. 5		tv, sr	oc, rare	yes	tv	rare	May 22	May 27	Aug 22	Oct 2
Southern parula warbler																					
Northern parula warbler	sr	c				sr, tv	local, ab	May 1-10	May 20-30	Aug 15-31	Oct 15-25	May 22	sr	rare	yes	tv	c	May 2	May 28	Sept 21	Oct 7
Cape May warbler		once				tv	rare	May 10-20	May 15-25	Aug. 15-31	Sept 25-Oct. 5		tv	rare		tv	fc			Aug 20	Oct 1
Yellow warbler	sr	c				sr	c	May 1-10			Sept 10-20	May 20	sr	ab	yes	sr	c	Apr 30			Sept 27
Black-throated blue warbler		unc				tv	c	May 1-10	May 15 30	Aug. 15-31	Oct 15-25		tv	c		tv	c	Apr. 25	May 28	Aug. 26	Oct 10
Myrtle warbler		c				tv, wv	ab, local	Apr 1-10	May 10-20				tv	c, oc		tv, wv	c, oc	Apr 13	May 28	Aug 16	Nov 11
Magnolia warbler		c	May			tv	c	May 1-10	May 15-30	Aug 15-31	Oct 10-20		tv, sr	c, rare	yes	tv	c	May 9	May 28	Aug. 13	Oct 11
Cerulean warbler						av	twice						sr	unc	yes						
Chestnut-sided warbler		rare; ab, spring 1867				tv, sr	c; c, local	May 1-10	May 20-30	Aug. 1-15	Sept 30-Oct 10	May 29	sr	unc	yes	sr	fc	May 2			Sept 24
Bay-breasted warbler		unc				tv	fc, irreg	May 10-20	May 20-30	Sept			tv	c		tv	fc	May 14	May 28	Aug 5	Sept 26
Black-poll warbler						tv	ab	May 10-20	May 25, June 5	Sept. 1-10	Oct 15-25		tv	c		tv	c	May 7	June 6	Aug. 30	Oct 16
Blackburnian warbler		ab				tv	unc	May 10-20	May 15-25	Aug. 15-31	Sept. 20-30		tv	c		tv	c	May 10	May 29	Aug 15	Oct 15
Yellow-throated warbler						av	once														
Black-throated green warbler	sr	c				tv, sr	local	Apr. 20-30	May 15-25	Aug. 15-31	Oct. 15-25		tv	c	(?)	tv, sr	c, unc	Apr 30	June 3	Sept. 1	Oct 26
Pine warbler	sr	unc			probably	sr	fc, L. I.	Apr 10-20	May 1-10			L. I., yes	tv	very rare		tv	oc				
Palm warbler						tv	rare						tv	rare		tv	rare	Apr. 20		Sept 30	Oct 12
Yellow palm warbler						tv	c	Apr. 10-20	Apr. 25-May 10	Sept. 20-30	Oct. 15-30					tv	fc	Apr 11	May 5	Sept 20	Nov 8
Prairie warbler						sr	rare	May 1-10	May 20-30							sr	rare	May 2			Sept 14
Ovenbird		ab				sr	ab	Apr 20-30			Oct 1-10	May 30			yes	sr	c	Apr. 27			Oct 10
Water-thrush						tv	c	May 1-10	May 15-30	Aug. 1-15	Sept. 25-Oct. 5	May 20	sr	unc	yes	tv	fc	May 11	May 21	July 28	Oct 3
Grinnell water-thrush						tv	rare						sr								
Louisiana water-thrush						sr	c	Apr. 10-20			Sept. 20-30	May 11				sr	c	Apr 9			Aug 24
Kentucky warbler						sr	c, local					June 1		twice, May '94, 24 May '91		sr	c	May 2			Aug 27
Connecticut warbler						tv	ab, fall			Sept. 1-10	Sept. 20-30		tv	rare, Aug. '93		tv	rare			Aug. 26	Oct 9
Mourning warbler		twice	24 May '70			tv	rare	May 20-30	May 30, June 5				tv, sr		yes	tv	rare	May 28	May 29	Aug. 18	Oct. 1
Northern yellow-throat		c				sr	ab	May 1-10			Oct 10-20	May 25	sr		26 May '90	sr	c	Apr 28			Oct 23
Yellow-breasted chat		unc				sr	c	May 1-10			Sept. 10-20	May 23	sr	rare	yes	sr	rare				Aug 19
Hooded warbler						sr	c	May 1-10			Sept. 20-30	May 15	sr			tv	fc	May 0	May 30	Aug 10	Sept 9
Wilson warbler		fc				tv	unc	May 10-20	May 20-30	Aug. 15-31	Sept. 20-30		tv	rare		tv	c	May 6	June 2	Aug 10	Oct 11
Canadian warbler		ab				tv	c	May 10-20	May 25-June 5	Aug. 1-15	Sept. 20-30		tv, sr (?)			tv	c	May 1			Oct. 3
American redstart	sr	ab				sr	c	May 1-10			Oct 1-10	May 17	sr	ab	yes	sr	c	Mar. 26	(?)	Sept. 24	Nov. 16
American pipit	wv	unc				tv	ab	Apr. 1-10	Apr. 15-25	Oct. 1-10	Oct. 25-Nov. 5		tv	irreg	yes (?)	tv	c				
Mockingbird						sr, wv	rare						sv	rare	yes	sr	c	Apr. 28			Oct 25
Catbird	sr	c				sr	ab	Apr. 20-30			Oct. 10-20	May 17	sr	ab	yes	sr	c	Apr. 22			Oct 28
Brown thrasher	sr	c				sr	c	Apr. 20-30			Oct. 10-20	May 16	sr	rare	yes	sr	c				
Carolina wren		c				res						Mar. 28	av	very rare, 22 Dec. '94				Apr. 23			Oct 24
House wren						sr	c	Apr. 20-30			Oct. 10-20	May 18	sr		yes	sr	c		Apr. 27	Sept. 18	
Winter wren	wv					wr	fc		Apr 1-30	Sept. 20-30			tv	unc		wv	fc				Oct 16
Short billed marsh wren						sr	c, local	May 10-20			Oct 10-20	June 7	sr		yes, local	sr	rare				Oct 28
Long-billed marsh wren		c				sr	ab	May 10-20			Oct. 10-20	May 31	sr		yes	sr	c	May 10			
Brown creeper	sr	c				wr	fc		Apr. 1-30	Sept. 20-30			tv, wv	c, oc		wv	fc		May 7	Sept 20	
White-breasted nuthatch	res	c				res	c					Apr. 17	res	c	yes	res	c				
Red-breasted nuthatch						tv, wv	c, oc		Oct	Aug. 30			wv	oc		wv	irreg		May 8	Aug 8	
Brown-headed nuthatch																					
Tufted titmouse		rare, twice				res	local					Staten Island May 22			yes	res	fc				
Chickadee	res	c				res	c					May 19	res	c							
Carolina chickadee						res	N. J.														
Hudsonian chickadee																wv	c		Apr. 28	Sept 20	
Golden-crowned kinglet		occurs				wv	c		Apr. 1-20	Sept. 20-30			tv, wv (?)	c		tv	c	Apr. 8	May 13	Sept 16	Nov 3
Ruby-crowned kinglet		occurs				tv	c	Apr. 10-20	May 1-15	Sept. 20-30	Oct. 20-30		tv	c	yes, once						
Blue-gray gnatcatcher						sv							sr	very rare							
Townsend solitaire						av				Nov. 25					yes	sr	c	Apr 30			Oct 2
Wood thrush	sr	c				sr	ab	Apr. 20-30			Oct. 1-10	May 17	sr	c	yes	sr	c	Apr 20			Sept 5
Wilson thrush	sr			Oct		sr	c	May 1-10		Sept. 20 30	Sept 20-30	May 20	sr	c		tv	fc	May 15	June 1	Sept 29	Oct 17
Gray-cheeked thrush				early fall		tv	c	May 10-20	May 25-June 5	Sept 10-20	Oct 15-25		tv	unc							
Bicknell thrush						tv	rare	May 20-30		Sept 10-20	Oct 1-10				yes, rare	tv	fc	May 2	May 30	Sept 19	Oct 22
Olive backed thrush	sr	ab				tv	c	May 10-20	May 20-June 1	Sept 10-20	Oct. 1-10		tv	oc	yes, rare	tv	c	Apr 5	May 9	Oct. 18	Nov 20
Hermit thrush		ab				tv, wr	ab, unc	Apr. 1 10	Apr. 25, May 10	Oct 1-10	Nov. 1-30	L. I., probably	tv	c	yes	sr, wv	c, oc	Mar 4			Oct 30
American robin	res					sr, wr	ab, unc	Feb. 15—Mar 10			Nov. 1-30	Apr. 20	sr	ab							
Varied thrush						av															
Wheatear						av	twice, L. I								yes	res	c				
Bluebird		ab	Mar	late autumn		sr, tv, wr	c, ab, fc	Feb. 15-Mar 10			Nov. 1-10	Apr 10	sr	ab							

SPECIES RECORDED	EATON, WESTERN NEW YORK, 1901							EMBODY, M			
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Le n
Rose-breasted grosbeak	sr	fc	May 7			Sept. 15	May 15, June 20	sr	c	May 2	
Blue grosbeak											
Indigo bunting	sr	c	May 10			Sept. 30	May 30, July 20	sr	ab	May 10	
Painted bunting											
Dickcissel	sv	ac									
Lark bunting											
Louisiana tanager											
Scarlet tanager	sr	fc	May 7			Sept. 30	May 20, June 15	sr	fc	May 10	
Summer tanager	sv	ac									
Purple martin	sr	fc, local	Apr. 18			Aug. 30	May 15, June 20	*sr	rare, Oneida		
Cliff swallow	sr	c	Apr. 24			Sept. 8	May 14, July 10	sr	ab	Apr. 30	
Barn swallow	sr	ab	Apr. 15			Sept. 12	May 5, July 30	sr	ab	Apr. 25	
Tree swallow	sr	fc	Apr. 2			Sept. 28	May 25, June 15	sr	c	Apr. 5	
Bank swallow	sr	ab	Apr. 21			Aug. 25	May 15, June 20	sr	c	Apr. 25	
Rough-winged swallow	sr	unc	Apr. 25			Aug. 10	June 15	*sr	rare; fc, local	May 12	
Bohemian waxwing	wv	oc						wv	oc, 4 Feb. '96		
Cedar waxwing	res	c					June 1–20	sr, res	ab, oc		
Northern shrike	wv	fc		Apr. 12	Oct. 25			wv	fc		
Migrant shrike	sr	fc	Mar. 25			Oct. 1	Apr. 20, May 15	sr	fc	Apr. 1	
Red-eyed vireo	sr	ab	May 11			Sept. 5	May 25, June 30	sr	ab	May 5	
Philadelphia vireo	tv	rare						tv	oc	May 4–7	
Warbling vireo	sr	c	May 4			Sept. 15	May 18, June 10	sr	ab	May 2	
Yellow-throated vireo	tv, sr	c, oc	May 5			Sept. 1	May 25, June 15	sr	fc	May 12	
Blue-headed vireo	tv, sr	unc, oc	May 5	May 30	Sept. 1	Sept. 20		*tv, *sr	c, oc		
Plumbeous vireo	av	once						av	once		
White-eyed vireo	sr	rare					local				
Black and white warbler	tv, sr	fc, oc	Apr. 28			Aug. 20		tv, sr	c, local	May 6	
Prothonotary warbler	av	once									
Worm-eating warbler	sr	rare					local				
Blue-winged warbler	tv	rare	May 22								
Golden-winged warbler	tv	rare	May 22				local				
Lawrence warbler											
Brewster warbler											
Nashville warbler	tv; sr, local	fc, rare	May 4	May 16				tv	fc	May 5	
Orange-crowned warbler	tv	rare, twice			Sept. 16	Oct. 2		tv	rare, once	May 15	
Tennessee warbler	tv; sr, local	rare			Sept. 18	Oct. 31		tv	fc	May 8	
Southern parula warbler											
Northern parula warbler	tv, sr	fc; c, local	May 10	May 30	Sept. 1	Sept. 20		tv, sr	ab, oc	May 5	
Cape May warbler	tv	unc	May 10					tv	rare	May 11	
Yellow warbler	sr	ab	May 1			Sept. 25	yes	sr	ab	May 2	
Black-throated blue warbler	tv, sr	c, oc	May 10	May 25	Sept. 15	Oct. 12	June 1–15	tv, sr	ab, oc	May 5	
Myrtle warbler	tv	ab	Apr. 24	May 18	Sept. 15	Oct. 25	yes, local	tv	c, ab	Apr. 25	
Magnolia warbler	tv, sr	c, oc	May 12			Sept. 25	June 1, 4	tv	c	May 10	
Cerulean warbler	sr	fc, local	May 12				yes	sr	rare, local	May 15	
Chestnut-sided warbler	sr	c	May 8			Sept. 5	May 15, June 10, July 5	sr	c	May 10	
Bay-breasted warbler	tv	fc	May 12	May 28	Sept. 15	Sept. 30		tv	c	May 20	
Black-poll warbler	tv	c	May 21	June 5	Sept. 10	Oct. 15		tv	ab	May 20	
Blackburnian warbler	tv, sr	c, oc	May 8			Sept. 25	yes	tv, *sr	c, local	May 5	
Yellow-throated warbler											
Black-throated green warbler	sr	fc	May 5			Oct. 15	June 1–20	tv, *sr	fc, local	May 10	
Pine warbler	tv	unc					local				
Palm warbler	tv	oc	May 12					*tv	fc		
Yellow palm warbler	tv	unc	Apr. 18	May 10	Sept. 20	Oct. 15					
Prairie warbler	sv	ac									
Ovenbird	sr	ab	May 4			Sept. 10	May 20, June 10	sr	ab	May 5	
Water-thrush	tv	fc	May 4	May 20	Aug. 1	Sept. 20		tv, sr	c	May 2	
Grinnell water-thrush											
Louisiana water-thrush	sr	c	Apr. 20			Aug. 20	May 20, June 15				
Kentucky warbler	tv	rare, twice	May '94								
Connecticut warbler	tv	unc			Sept. 4–7	Sept. 18		*tv, fall	rare		
Mourning warbler	sr	fc	May 15			Sept. 20	May 30, June 20	*tv, sr	rare, local	May 10	
Northern yellow-throat	sr	c	May 21			Oct. 10	May 25, June 15	sr	ab	May 2	
Yellow-breasted chat	sr	rare					yes		*once		
Hooded warbler	sr	fc	May 12			Aug. 15	June 1–20	*sr	local, rare		
Wilson warbler	tv	unc	May 10	May 30	Sept. 1	Sept. 20		tv	unc	May 15	
Canadian warbler	sr, tv	local, c	May 8			Sept. 15	May 30, June 10	*sr, tv	fc, fc	May 10	
American redstart	sr	fc	May 10			Sept. 18	May 20, June 15	sr	ab	May 5	
American pipit	tv	fc	Apr.	May 15	Sept. 25	Nov. 10		tv	ab, fall		
Mockingbird	sv	ac, twice									
Catbird	sr	ab	May 5			Sept. 30	May 15, July 5	sr	ab	May 10	
Brown thrasher	sr	fc	May 1			Oct. 10	May 15, June 20	*tv	rare, once	May 12	
Carolina wren	sr	rare					yes, local				
House wren	sr	rare	May 4			Sept. 20	May 15, July 5	sr	unc	May 5	
Winter wren	tv	fc	Apr. 8	May 12	Sept. 25	Nov. 30	yes, local	res	c		
Short-billed marsh wren	sr	unc					yes				
Long-billed marsh wren	sr	c	May 10			Oct. 20	May 30, June 25	sr	c	May 15	
Brown creeper	tv, wv, sr	c, fc, oc					rarely	tv, res	ab, oc	Apr. 1	Apr.
White-breasted nuthatch	res	ab					Apr. 18, May 15	res	ab		
Red-breasted nuthatch	wv	fc		Mar. 30	Oct. 1		rarely	wv			Apr.
Brown-headed nuthatch	sv	ac	24 May '88								
Tufted titmouse	av		17 Mar. '89								
Chickadee	res	ab					Apr. 18, May 25	res	ab		
Carolina chickadee											
Hudsonian chickadee											
Golden-crowned kinglet	tv, wv	c, oc		Apr. 30	Oct. 1			tv, wv	ab, oc	Apr. 10	May
Ruby-crowned kinglet	tv	c	Apr. 15	May 7	Oct. 10	Nov. 1		tv	c	Apr. 14	May
Blue-gray gnatcatcher	sr	rare					rarely				
Townsend solitaire											
Wood thrush	sr	c	May 6			Sept. 20	May 20, June 15	sr	c	May 15	
Wilson thrush	sr	c	May 6			Sept. 10	May 20, June 20	sr	c	May 10	
Gray-cheeked thrush	tv	fc	May			Oct.		*tv	fc		
Bicknell thrush											
Olive-backed thrush	tv	c	May 8	May 30	Sept. 20	Oct. 15	rarely	tv	fc	May 10	
Hermit thrush	tv	c	Apr. 23	May 8	Sept. 25	Oct. 30	rarely	*sr, local; tv	c	May 1	May
American robin	sr	ab	Mar. 3			Nov. 20	Apr. 15–July 5	sr	ab	Mar. 29	
Varied thrush											
Wheatear											
Bluebird	sr	c	Mar. 5			Nov. 20	Apr. 15–July 8	sr	ab	Apr. 1	

r, 1901			LONG ISLAND, DUTCHER, ET AL.						
ns	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds
		yes	sr, tv	unc, fc	May 2, 6, 10			Sept. 1, 13, Oct. 2	May 25
			av		May '43				
		yes	tv, sr	c	May 10, 17, 30			Sept. 20, 23, Oct. 11	June 1
			av						
			sr, tv	c, 1841; 1888			Sept. 29, Aug. 25	Oct. 10	
			av	twice			Sept. 4, 11		
		yes	sr	c	May 9, 11, 17			Sept. 23, Oct. 11, 18	June 6, 19
			av	11 records	Apr. 6, 11, May 14				
		yes	sr	c	Apr. 3, 13, 29			Sept. 12, 20	May 15
		yes	sr	fc	Apr. 23, 28			Aug. 15, Sept., Oct. 11	yes
		yes	sr	ab	Apr. 9, 11, 23			Sept. 17, 22, Oct. 15	May 26, June 12, 28
		yes	tv, sr	ab, c	Feb. 16, Mar. 21, 30	May 9, 23	Aug. 8, 9, Sept. 25	Oct. 19, Nov. 15, 24	May 3, June 4, 10
		yes	sr	ab	Apr. 9, 14, May 18			Aug. 22, Sept. 14	May 25
			sr		Apr. 19, 27			Aug	June 3, 12
			wv	rare		18 Apr. '89	1830, '32, '38, '51		
		yes	sr, res	c, oc	Feb. 4, Mar. 11, Apr. 10			Oct. 4, Nov. 1, 18	June 23, July 7
			wv	unc		Mar. 21, 25, Apr. 5	Nov. 6, 13, Dec. 14		
		yes	tv	rare			Aug. 28, Sept. 19		
	Sept. 15	yes	sr	ab	May 5, 11, 26			Sept. 23, Oct. 8, 25	June 4, 13, 15
			tv	rare	May 21		Sept. 17, 18, 25		
	Sept. 15	yes	sr	unc	May 3, 9, 23			Sept. 4	yes
	Sept. 1	yes	sr	c	May 1, 12, 17			Sept. 17, 20, 23	June 2
			tv	fc	May 1		Sept. 21, 23	Oct. 3, 7, 11	
			sr	c	Apr. 29, May 5, 9			Sept. 20, 30	June 6, 13
		yes	sr	c	Apr. 23, 28, May 4			Aug. 25, Sept. 1, Oct. 24	May 20, 27, June 3
			av	3 records	Apr., May		26 Aug. '86		
			tv, sr	rare	May 4			Sept. 16, 21	June 5
			sr	unc	May 4, 11, 24				May 15, June 10
			tv	rare	May 10, 11, 14			Aug. 15	
			av		8 May '02				
			av		16 May '92				
	May 15		tv	unc	May 9, 13	May 15, 24	Sept. 10, 18, 22	Oct. 15	
			tv	rare			12 Oct. '92		
			tv	unc, fall			Sept. 1, 23	Sept. 28, Oct. 3	
			sr, tv	local, c	May 2, 7, 19			Sept. 20, Oct. 11, 20	May 30, June 1, 10
			tv	rare	May 11	May 20	Sept. 12, 15		
		yes	sr	c	Apr. 23, May 2, 6			Sept. 17, 20	May 30, June 20
			tv	c	May 4, 11, 15	May 20, 25	Sept. 1, 17	Oct. 11, 13, Nov. 30	
			wv, tv	c, ab	Apr. 10, 20, 27	May 2, 9, 16	Oct. 9, 11, 25	Nov. 5, 27, Dec. 10	
			tv	fc	May 11, 12, 14	May 19, 23	Sept. 1, 18, 23	Oct. 11, 14	
		yes		rare					
		June 1	tv, sr	c, oc	May 5, 7, 10	May 19, 23		Sept. 1, 18, 21	yes
			tv	rare	May 16	23 June '70, May 29	Sept. 12, 18	Sept. 24, Oct. 6	
			tv	c	May 9, 15, 18	May 17, 30	Sept. 1, 18, 25	Oct. 20, 25, 30	
		yes	tv	unc	May 10, 12, 19	May 27, 30	Sept. 1, 23, 28	Oct. 14	
			av	twice					
		yes	tv, sr	c, local	May 4, 6, 10			Oct. 2, 11, 14	June 5
			tv, sr	c	Apr. 3, 7, May 6			Oct. 15, Nov. 7	May 4
			tv	rare			Sept. 7, 23	Oct. 11	
			tv	fc	Apr. 14, 16, 24	May 1, 6	Sept. 21, Oct. 5	Oct. 15, 18, 22	
			sr	c	May 4, 6			Aug. 27, Sept. 13, 18	June 4
		yes	sr	c	Apr. 25, May 3, 12			Sept. 20, 23, Oct. 11	May 30, June 13
		yes	tv	c	May 2, 8, 12	May 15, 20, 25	Aug. 19, 30, Sept. 2	Sept. 26, Oct. 6	
			tv	once					
			tv	rare	Apr. 12, 13				
			sr	rare	May 18			19 Aug. '88	once
			tv	irreg, fall			Sept. 12, 17, 23	Oct. 2, 7, 11	
		yes	tv	rare	29 May '93	June '62	Sept. 11		
		yes	sr	ab	May 2, 5, 11			Oct. 14, 23, 25	June 6, July 9
			sr	c	May 3, 11, 19			Aug. 24, Sept. 18	May 25, June 6
		yes	tv	rare	Apr. 30	May 16	Sept. 1	Sept. 24	
			tv	unc	May 13, 19	May 25, June 13	Aug. 22, Sept. 21	Oct. 6	
		yes	tv	fc	May 10, 15, 18	May 20, 23	Aug. 21	Sept. 18, 19	
		yes	sr	c	May 3, 6, 15			Sept. 18, 23	May 24, June 8
	Nov. 6		tv, wv	ab, oc	Mar. 12, 19, 29	Apr. 19, May 3, 27	Sept. 6, 14, 30	Nov. 7, 16, 30	
			res	rare	May 10			Sept. 14, Nov. 7	yes
		yes	sr, res	ab, rare	May 1, 5, 10			Oct. 9, 11, 20	May 30, June 1, 17
			sr, res	c, rare	Apr. 2, 24, May 1			Sept. 12, Oct. 13, Nov. 3	May 24, June 13
			res	rare					8 May '79
		yes	sr	c	Mar. 29, Apr. 21, May 10			Sept. 21, Oct. 6	May 20, June 24
			tv, wv	fc		Apr., May 5	Sept. 29, Oct. 11, 16		
		yes	sr, res	c, rare	May 3, 12, 14			Sept. 21, Oct. 10, 11	June 4, 23
		local	tv, wv	ab, fc		Apr. 20, May 4, 16	Oct. 3, 11, 22		
		May 1	tv, res	c, oc		Mar. 20	Oct. 18, 24, Nov. 1		(?)
			tv, wv	irreg, oc		May 11, July 20	Sept. 14, Oct. 2, 25		
			res	rare					
		May 5	res	c					May 5, 20, 30
			wv	c		Apr. 15, May 2	Sept. 24, Oct. 12, Nov. 5		
			tv	c	Apr. 4, 12, 15	May 6, 15	Sept. 22, Oct. 5, 12	Oct. 12, 21, Nov. 11	
				rare	Apr. 18, July 1		Sept. 2	Sept. 22, Oct. 11	
		yes	sr	c	Apr. 13, May 2, 4			Sept. 18, 26, Oct. 4	May 16, 20, 30
		yes	tv, sr	fc, oc	May 1, 14, 18	May 21	Sept. 17, 23, 30	Oct. 3, 15, 19	May 21
			tv	fc	May 18, 19, 21	May 30	Sept. 18, 23, 30	Oct. 11	
			tv	unc			Sept. 18, 23	Oct. 12, 23	
			tv	fc	May 8, 11, 17	May 19	Sept. 18, 27, 30	Oct. 11, 13, 17	
			tv, res	c, rare	Apr. 6, 10, 29	May 10, 14, 22	Oct. 11, 18, 25	Nov. 11, 12	May 16
	Oct., late	yes	sr, res	ab, oc	Feb. 7, 19, Mar. 19			Nov. 15, Dec. 15	May 1, June 13, July 17
			av	once			20 Dec. '89		
			av	twice					
	Nov. 1	yes	sr, res	c, oc	Feb. 6, 22, Mar. 16			Nov. 3, 13, 17	Apr. 25, May 26, June 25

SPECIES RECORDED	EATON, WESTERN NEW YORK, 1901							EMBODY, MADISON COUNTY, 1901							LONG ISLAND, DUTCHER, ET AL.						
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds
Rose-breasted grosbeak	sr	fc	May 7			Sept. 15	May 15, June 20	sr	c	May 2				yes	sr, tv	unc, fc	May 2, 6, 10			Sept. 1, 13, Oct. 2	May 25
Blue grosbeak															av		May '43				
Indigo bunting	sr	c	May 10			Sept. 30	May 30, July 20	sr	ab	May 10				yes	tv, sr	c	May 10, 17, 30			Sept. 20, 23, Oct. 11	June 1
Painted bunting															av						
Dickcissel	sr	ac													sr, tv	c, 1841; 1888			Sept. 20, Aug. 25	Oct. 10	
Lark bunting															av	twice			Sept. 4, 11		
Louisiana tanager																					
Scarlet tanager	sr	fc	May 7			Sept. 30	May 20, June 15	sr	fc	May 10				yes	sr	c	May 9, 11, 17			Sept. 23, Oct. 11, 18	June 6, 19
Summer tanager	sv	ac													av	11 records	Apr. 6, 11, May 14				
Purple martin	sr	fc, local	Apr. 18			Aug. 30	May 15, June 20	*sr	rare, Oneida					yes	sr	c	Apr. 3, 13, 29			Sept. 12, 20	May 15
Cliff swallow	sr	c	Apr. 24			Sept. 8	May 14, July 10	sr	ab	Apr. 30				yes	sr	fc	Apr. 23, 28			Aug. 15, Sept., Oct. 11	yes
Barn swallow	sr	ab	Apr. 15			Sept. 12	May 5, July 30	sr	ab	Apr. 25				yes	sr	ab, c	Apr. 9, 11, 23			Sept. 17, 22, Oct. 15	May 26, June 12, 28
Tree swallow	sr	fc	Apr 2			Sept. 28	May 25, June 15	sr	c	Apr. 5				yes	tv, sr	ab, c	Feb. 16, Mar. 21, 30	May 9, 23	Aug. 8, 9, Sept 25	Oct. 10, Nov. 15, 24	May 3, June 4, 10
Bank swallow	sr	ab	Apr. 22			Aug. 25	May 15, June 20	sr	c	Apr. 25				yes	sr	ab	Apr. 9, 14, May 18			Aug. 22, Sept. 14	May 25
Rough-winged swallow	sr	unc	Apr. 25			Aug. 10	June 15	*sr	rare; fc, local	May 12					sr		Apr. 19, 27			Aug.	June 3, 12
Bohemian waxwing	wv	oc						wv	oc, 4 Feb. '96						wv	rare		18 Apr. '89	1830, '32, '38, '51		
Cedar waxwing	res	c					June 1–20	sr, res	ab, oc					yes	sr, res	c, oc	Feb. 4, Mar. 11, Apr. 10			Oct 4, Nov. 1, 18	June 21, July 7
Northern shrike	wv	fc		Apr. 12	Oct. 25			wv	fc						wv	unc		Mar. 21, 25, Apr. 5	Nov. 6, 13, Dec. 14		
Migrant shrike	sr	fc	Mar. 25			Oct. 1	Apr. 20, May 15	sr	fc	Apr. 1				yes	tv	rare			Aug. 28, Sept. 10		
Red-eyed vireo	sr	ab	May 11			Sept. 5	May 25, June 30	sr	ab	May 5			Sept. 15	yes	sr	ab	May 5, 11, 26			Sept. 23, Oct 8 25	June 4, 13, 15
Philadelphia vireo	tv	rare						tv	oc	May 4–7		Sept. 16			tv	rare	May 21		Sept. 17, 18, 25		
Warbling vireo	sr	c	May 4			Sept. 15	May 18, June 10	sr	ab	May 2			Sept. 15	yes	sr	unc	May 3, 9, 23			Sept. 4	
Yellow-throated vireo	tv, sr	c, oc	May 5			Sept. 1	May 25, June 15	sr	fc	May 12			Sept 1	yes	sr	c	May 1, 12, 17			Sept. 17, 20, 23	June 2
Blue-headed vireo	tv, sr	unc, oc	May 5	May 30	Sept. 1	Sept 20		*tv, *sr	c, oc						tv	fc	May 1		Sept. 21, 23	Oct. 3, 7, 11	
Plumbeous vireo	av	once						av	once												
White-eyed vireo	sr	rare													sr	c	Apr. 29, May 5, 9			Sept. 20, 30	June 6, 13
Black and white warbler	tv, sr	fc, oc	Apr. 28			Aug. 20	local	tv, sr	c, local	May 6				yes	sr	c	Apr. 23, 28, May 4		26 Aug. '86	Aug. 25, Sept 1, Oct. 24	May 20, 27, June 3
Prothonotary warbler	av	once													av	3 records	Apr., May				
Worm-eating warbler	sr	rare					local								tv, sr	rare	May 4			Sept. 16, 21	June 5
Blue winged warbler	tv	rare	May 22												sr	unc	May 4, 11, 24				May 15, June 10
Golden-winged warbler	tv	rare	May 22				local								tv	rare	May 10, 11, 14			Aug. 15	
Lawrence warbler															av		8 May '02				
Brewster warbler															av		16 May '02		Sept. 10, 18, 22	Oct 15	
Nashville warbler	tv; sr, local	fc, rare	May 4	May 16				tv	fc	May 5			May 15		tv	unc	May 9, 13	May 15, 24	12 Oct. '02		
Orange-crowned warbler	tv	rare, twice			Sept. 16	Oct. 2		tv	rare, once	May 15					tv	rare			Sept. 1, 23	Sept. 28, Oct 1	
Tennessee warbler	tv; sr, local	rare			Sept. 18	Oct. 31		tv	fc	May 8					tv	unc, fall					
Southern parula warbler																				Sept. 20, Oct 11 2	May 30, June 1, 10
Northern parula warbler	tv, sr	fc, c, local	May 10	May 30	Sept. 1	Sept. 20		tv, sr	ab, oc	May 5					sr, tv	local, c	May 2, 7, 19		Sept. 12, 15		
Cape May warbler	tv	unc	May 10					tv	rare	May 11					tv	rare	May 11	May 20		Sept. 17, 30	May 30, June 20
Yellow warbler	sr	ab	May 1			Sept 25	yes	sr	ab	May 2				yes	sr	c	Apr. 23, May 2, 6		Sept. 1, 17	Oct. 11, 13, Nov. 30	
Black-throated blue warbler	tv, sr	c, oc	May 10	May 25	Sept. 15	Oct. 12	June 1–15	tv, sr	ab, oc	May 5					tv	c	May 4, 11, 15	May 20, 25	Oct. 9, 11, 25	Nov. 5, 27, Dec. 10	
Myrtle warbler	tv	ab	Apr. 24	May 18	Sept 15	Oct 25	yes, local	tv	c, ab	Apr. 25					wv, tv	c, ab	Apr. 10, 20, 27	May 2, 9, 16	Sept. 1, 18, 23	Oct. 11, 14	
Magnolia warbler	tv, sr	c, oc	May 12			Sept. 25	June 1, 4	tv	c	May 10					tv	fc	May 11, 12, 14	May 19, 23			
Cerulean warbler	sr	fc, local	May 12				yes	sr	rare, local	May 15				yes		rare				Sept. 1, 18, 22	yes
Chestnut-sided warbler	sr	c	May 8			Sept. 5	May 15, June 10, July 5	sr	c	May 10				June 1	tv, sr	c, oc	May 5, 7, 10	May 19, 23	Sept. 12, 18	Sept. 24, Oct 6	
Bay breasted warbler	tv	fc	May 12	May 28	Sept. 15	Sept. 10		tv	c	May 20					tv	rare	May 16	23 June '70, May 20	Sept. 1, 18, 25	Oct. 20, 25, 12	
Black-poll warbler	tv	c	May 21	June 5	Sept 10	Oct. 15		tv	ab	May 20					tv	c	May 9, 15, 18	May 17, 30	Sept. 1, 23, 28	Oct. 14	
Blackburnian warbler	tv, sr	c, oc	May 8			Sept. 25	yes	tv, *sr	c, local	May 5				yes	tv	unc	May 10, 12, 19	May 27, 30			
Yellow-throated warbler															av	twice				Oct. 2, 11, 14	June 5
Black-throated green warbler	sr	fc	May 5			Oct. 15	June 1–20	tv, *sr	fc, local	May 10				yes	tv, sr	c, local	May 4, 6, 10			Oct. 15, Nov 7	May 4
Pine warbler	tv	unc					local								tv, sr	c	Apr. 3, 7, May 6		Sept. 7, 23	Oct. 11	
Palm warbler	tv	oc	May 12					*tv	fc						tv	rare			Sept. 21, Oct 5	Oct. 15, 18, 22	
Yellow palm warbler	tv	unc	Apr 18	May 10	Sept. 20	Oct. 15									tv	fc	Apr. 14, 16, 24	May 1, 6		Aug. 27, Sept. 13, 18	June 4
Prairie warbler	sv	ac													sr	c	May 4, 6			Sept. 20, 23, Oct. 11	May 30, June 13
Ovenbird	sr	ab	May 4			Sept. 10	May 20, June 10	sr	ab	May 5				yes	sr	c	Apr. 25, May 3, 12	May 15, 20, 25	Aug. 19, 30, Sept 2	Sept 26, Oct 6	
Water-thrush	tv	fc	May 4	May 20	Aug. 1	Sept. 20		tv, sr	c	May 2				yes	tv	c	May 2, 8, 12				
Grinnell water-thrush															tv	once				19 Aug. '88	once
Louisiana water-thrush	sr	c	Apr 20			Aug. 20	May 20, June 15								tv	rare	Apr. 12, 13			Oct. 2, 7, 11	
Kentucky warbler	tv	rare, twice	May '94												sr	rare	May 18		Sept. 12, 17, 24		
Connecticut warbler	tv	unc			Sept 4–7	Sept. 18		*tv, fall	rare						tv	irreg, fall		June '02	Sept. 11	Oct. 14, 23, 25	June 6, July 9
Mourning warbler	sr	fc	May 15			Sept. 20	May 30, June 20	*tv, sr	rare, local	May 10				yes	tv	rare	29 May '03			Aug. 24, Sept 18	May 25, June 6
Northern yellow-throat	sr	c	May 21			Oct. 10	May 25, June 15	sr	ab	May 2				yes	sr	ab	May 2, 5, 11			Sept. 24	
Yellow-breasted chat	sr	rare					yes		*once						sr	c	May 3, 11, 19	May 16	Sept. 1	Oct. 6	
Hooded warbler	sr	fc	May 12			Aug. 15	June 1–20	*sr	local, rare					yes	tv	rare	Apr. 10	May 25, June 13	Aug. 22, Sept 21	Sept. 18, 19	
Wilson warbler	tv	unc	May 10	May 30	Sept. 1	Sept. 20		tv	unc	May 15					tv	unc	May 13, 19	May 20, 23	Aug. 21	Sept. 18, 23	May 24, June 8
Canadian warbler	sr, tv	local c	May 8			Sept. 15	May 30, June 10	*sr, tv	fc, fc	May 10				yes	tv	fc	May 10, 15, 18			Nov. 7, 16, 30	
American redstart	sr	fc	May 10			Sept. 18	May 20, June 15	sr	ab	May 5				yes	sr	c	May 3, 6, 15	Apr. 19, May 3, 27	Sept. 6, 14, 30	Sept. 14, Nov. 7	yes
American pipit	tv	fc	Apr	May 15	Sept. 25	Nov. 10		tv	ab, fall					Sept. 20	tv, wv	ab, oc	Mar. 22, 19, 29			Oct. 9, 11, 20	May 10, June 1, 17
Mockingbird	sv	ac, twice													res	rare	May 10			Sept. 12, Oct. 13, Nov. 1	May 24, June 13
Catbird	sr	ab	May 5			Sept. 30	May 15, July 5	sr	ab	May 10				yes	sr, res	ab, rare	May 1, 5, 10				8 May '79
Brown thrasher	sr	fc	May 1			Oct. 10	May 15, June 20	*tv	rare, once	May 12					sr, res	c, rare	Apr. 2, 24, May 1			Sept. 21, Oct 6	May 20, June 24
Carolina wren	sr	rare					yes, local								res	rare					
House wren	sr	rare	May 4			Sept. 20	May 15, July 5	sr	unc	May 5				yes	sr	c	Mar. 20, Apr. 21, May 10	Apr., May 5	Sept 29, Oct. 11, 16		
Winter wren	tv	fc	Apr. 8	May 12	Sept. 25	Nov. 30	yes, local		c						tv, wv	fc				Sept 21, Oct. 10 11	June 4, 23
Short-billed marsh wren	sr	unc					yes														
Long-billed marsh wren	sr	c	May 10			Oct. 20	May 30, June 25	sr	c	May 15				yes	sr, res	c, rare	May 3, 12, 14	Apr. 20, May 4, 10	Oct. 3, 13, 22		(?)
Brown creeper	tv, wv, sr	c, fc, oc					rarely	tv, res	ab, oc	Apr. 1	Apr. 25			local	tv, wv	ab, fc		Mar. 22	Oct. 18, 24 Nov. 1		
White-breasted nuthatch	res	ab					Apr. 18, May 15	res	ab					May 1	tv, res	c, oc		May 11, July 20	Sept. 14, Oct. 2, 25		
Red-breasted nuthatch	wv	fc		Mar. 30	Oct. 1		rarely	wv			Apr 20	Oct. 10			tv, wv	irreg, oc					
Brown-headed nuthatch	sv	ac	24 May '88																		May 5, 20, 10
Tufted titmouse	av		17 Mar. '89												res	rare					
Chickadee	res	ab					Apr. 18, May 25	res	ab					May 5	res	c					
Carolina chickadee																					
Hudsonian chickadee															wv	c			Sept. 24, Oct 12, Nov 5		
Golden-crowned kinglet	tv, wv	c, oc		Apr. 30	Oct. 1			tv, wv	ab, oc	Apr. 10	May 10				tv	c	Apr. 4, 12, 15	Apr. 15, May 2	Sept. 22, Oct 5, 12	Oct 12 21 Nov 11	
Ruby-crowned kinglet	tv	c	Apr. 15	May 7	Oct. 10	Nov. 1		tv	c	Apr. 14	May 1					rare	Apr. 18, July 1	May 6, 13	Sept. 8	Sept. 22, Oct 11	
Blue-gray gnatcatcher	sr	rare					rarely													Sept. 18, 26 Oct 4	May 16, 22, 1
Townsend solitaire																				Oct 3, 15, 19	May 21
Wood thrush	sr	c	May 6			Sept. 20	May 20, June 15	sr	c	May 15				yes	sr	c	Apr 14, May 2, 4		Sept. 17, 21, 10	Oct. 11	
Wilson thrush	sr	c	May 6			Sept. 10	May 20, June 20	sr	c	May 15				yes	tv, sr	fc, oc	May 1, 14, 18	May 30	Sept 18, 21, 1	Oct. 12, 21	
Gray-cheeked thrush	tv	fc	May			Oct		*tv	fc						tv	fc	May 18, 19, 21		Sept. 18, 23	Oct 11, 14, 17	
Bicknell thrush															tv	unc		May 19	Sept. 18, 27, 1	Nov. 11, 12	May 16
Olive-backed thrush	tv	c	May 8	May 10	Sept. 20	Oct. 15	rarely	tv	fc	May 10					tv	fc	May 8, 11, 17	May 10, 14, 22	Oct. 11, 18, 25	Nov. 15, Dec 15	May 1, June 11, July 17
Hermit thrush	tv	c	Apr 23	May 8	Sept. 25	Oct. 30	rarely	*sr, local; tv	c	May 1	May 15				tv, fc	c, rare	Apr 6, 10, 29		20 Dec '89		
American robin	sr	ab	Mar 3			Nov. 20	Apr. 15–July 5	sr	ab	Mar. 29					sr, res	ab, oc	Feb. 7, 19, Mar. 10			Nov. 3, 11, 17	Apr. 25, May 20, June 25
Varied thrush															av	once					
Wheatear															av	twice					
Bluebird	sr	c	Mar 5			Nov. 20	Apr. 15–July 8	sr	ab	Apr. 1				Oct, late	sr, res	c, oc	Feb. 6, 22, Mar. 10				

SPECIES RECORDED	HOFFMAN, EASTERN N. Y., 1904		BRAISLIN, LONG ISLAND, 1907						
	Resident or transient	Common or rare	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Bre
Rose-breasted grosbeak	sr	c, rare; on L. I.	tv	fc	May 3, 12			Sept. 25	
Blue grosbeak				very rare	15 May '38				
Indigo bunting	sr	c	sr	c	Apr. 27			Oct. 1	June
Painted bunting				several spec.					
Dickcissel			av				Aug. 25, Sept. 29	Oct. 10	
Lark bunting			av	once			4 Sept. '88		
Louisiana tanager									
Scarlet tanager	sr	c	sr	c	May 8			Oct. 12	
Summer tanager				rare	Apr. 7, 9, 11	May 1, 14			
Purple martin	sr	local	sr	c, local	Apr. 2			Sept. 17	
Cliff swallow	sr	ab, local	sr	rare			Aug. 2	Aug. 29	local
Barn swallow	sr	ab	sr	c	Mar. 16			Sept. 24	May 30
Tree swallow	sr	c, local	sr, tv	rare, ab	Mar. 19	May 15	July 28	Oct. 28	local
Bank swallow	sr		sr	c, local	Apr. 28			Sept	
Rough-winged swallow	sr, local	c, local	sr	rare	Apr. 19				June 3,
Bohemian waxwing							1830, 1832		
Cedar waxwing	sr, wv	c; oc	res	c					July
Northern shrike	wv	unc	wv	fc		Mar. 19	Oct. 26		
Migrant shrike	sr, tv	fc, local	tv	rare			Aug		
Red-eyed vireo	sr	ab	sr	ab	May 5			Oct. 31	June 1
Philadelphia vireo	tv	rare	tv	rare			Sept. 14, 18	Sept. 20, 25	
Warbling vireo	sr	fc	sr	rare, local	May 8			Sept. 16	June 11
Yellow-throated vireo	sr, local		sr	fc	Apr. 23			Aug. 24	June
Blue-headed vireo	tv; sr, local	c	tv	unc	Apr. 30	May 7		Oct. 11	
Plumbeous vireo									
White-eyed vireo	sr	c, local	sr	c	May 8			Sept. 13	June 1
Black and white warbler	sr	c	sr	c	Apr. 19			Oct. 1	
Prothonotary warbler			av	twice	May '49			26 Aug. '80	
Worm-eating warbler	sr	fc, local	tv	rare	May 16		Aug. 28	Sept. 16, 21	
Blue-winged warbler	sr	fc, local	sr	c, local	May 2			Sept	
Golden-winged warbler	sr	unc, local	tv	rare	May 10, 11			Aug. 29	
Lawrence warbler				once	8 May '02				
Brewster warbler				once	16 May '92				
Nashville warbler	tv, sr	c; c, local	tv, sr (?)	rare	May 6, 9, 10	May 15, 24	Sept. 10	Sept. 26, Oct. 15	
Orange-crowned warbler			av	3			12 Oct. '92		
Tennessee warbler	tv	rare, spring; c, fall	tv	rare			Aug. 27, Sept. 8	Sept. 20, Oct. 3	
Southern parula warbler									
Northern parula warbler	tv, sr	c, local	sr, tv	c, local, ab	May 2	May 22	Sept. 4	Oct. 1, 11	June 5
Cape May warbler	tv	rare	tv	rare	May 11		Sept. 12		
Yellow warbler	sr	c	sr	c	Apr. 18			Sept. 20	
Black-throated blue warbler	tv, sr	fc; c, local	tv	c	May 7	May 27	Aug. 29	Oct. 10	
Myrtle warbler	tv, sr, wv	ab; c, local; fc, local	tv, wv	c, local		May 15	Oct. 5		
Magnolia warbler	tv, sr	c; c, local	tv	c	May 5	May 28	Aug. 27	Oct. 12	
Cerulean warbler			av	once					
Chestnut-sided warbler	sr	c	tv	c	May 1	May 28	Sept. 12	Sept. 20	
Bay-breasted warbler	tv	fc	tv	rare	May 16	May 29	Sept. 12	Sept. 29	
Black-poll warbler	tv, sr	c, local	tv	c	May 11	June 3	Sept. 9	Oct. 20	
Blackburnian warbler	tv, sr	fc, local; c, local	tv	fc	May 6	May 28	Sept. 5	Sept. 20	
Yellow-throated warbler			av	once					
Black-throated green warbler	sr, tv	c; c, local	tv, sr	c, rare					May 30
Pine warbler	sr, tv	c, local	sr	c	Apr. 7			Aug. 2	May 4
Palm warbler	tv	rare, autumn	tv	rare	Apr. 18		Sept. 7	Oct. 10	
Yellow palm warbler	tv	fc	tv	fc	Apr. 11	Apr. 30	Oct. 11	Oct. 30	
Prairie warbler	sr	c, local; rare, local	sr	fc	May 2			Sept. 11	late Ju
Ovenbird	sr	c	sr	c	Apr. 30			Oct. 3	
Water-thrush	sr, local; tv, local		tv	c	May 7	May 27	Aug. 14, 20	Oct. 11	
Grinnell water-thrush			av	once					
Louisiana water-thrush	sr	fc, local	sr	rare					
Kentucky warbler	sr	fc, local	sr (?)	very rare	May 18			Aug. 18	
Connecticut warbler	tv	rare, fall	tv	fc, fall			Sept. 4	Oct. 12	
Mourning warbler	sr, local; tv, local		tv	rare, twice					
Northern yellow-throat	sr	c	sr	c	May 1			Oct. 25	May 30
Yellow-breasted chat	sr	c, local	sr	c, local	May 2			Oct. 2	
Hooded warbler	sr, local			rare	Apr. 30	May 16	Aug. 28	Sept. 2	
Wilson warbler	tv	unc	tv	rare					
Canadian warbler	sr, local; tv, local		tv	c	May 17	June 3	Aug. 21	Sept. 5	
American redstart	sr	c	sr	c	May 7			Sept. 28	June 1
American pipit	tv	c, fall; rare, spring	tv	fc	Apr. 12		Oct. 8	Nov. 27	
Mockingbird	av, local		sr	very rare				Nov	
Catbird	sr	c	sr, wv	c, very rare	May 2			Oct. 26	May 25
Brown thrasher	sr	c, local	sr, wv	c, oc	Apr. 26			Oct. 29	
Carolina wren	sr	fc, local	res	rare					yes
House wren	sr	c, local	sr	c	May 6			Oct. 6	
Winter wren	sr, wv	c, local; fc, local	tv, wv	fc, rare					
Short-billed marsh wren	sr	rare, local		once					
Long-billed marsh wren	sr	c, local	sr	ab, local	May 4			Oct. 8	
Brown creeper	sr, local, wv, local		wv	c		Apr. 12	Oct. 6		
White-breasted nuthatch	sr; res, local		res	c					
Red-breasted nuthatch	tv, res	irreg; ab, local	wv	fc		Apr. 20	July 20		
Brown-headed nuthatch									
Tufted titmouse	res, local			rare	14 Mar. '98				
Chickadee	res		res	c					yes
Carolina chickadee									
Hudsonian chickadee	res, local								
Golden-crowned kinglet	sr	c, local	wv	c		Apr. 13	Oct. 10		
Ruby-crowned kinglet	tv	fc	tv		Apr. 5	May 7	Sept. 25	Oct. 12	
Blue-gray gnatcatcher				4 times	18 Apr. '74		2 Sept. '85		
Townsend solitaire			av				25 Nov. '05		
Wood thrush	sr	c, local	sr	c	May 4			Sept. 26	
Wilson thrush	sr	c	sr	unc	Apr. 13			Oct. 15	
Gray-cheeked thrush	tv		tv	c	May 11	May 30	Sept. 26	Oct. 12	
Bicknell thrush	sr, local		tv	fc			Sept. 18	Oct. 23	
Olive-backed thrush	sr, local		tv	c	Apr. 30	May 17	Sept. 4	Oct. 30	
Hermit thrush	sr, wv	c, local; oc, local	tv	c	Apr. 10	May 6	Sept. 14	Dec. 1	
American robin	sr, res	c; c, local	sr, wv	ab, oc	Feb. 23			Dec. 23	
Varied thrush			av	3			19 Nov. '05		
Wheatear			av	several					
Bluebird	sr, res, local	c	sr, wv	unc, oc	Mar. 14			Nov. 28	

	ALBANY						ALLEGANY			
nt nt	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Breeds
	fc	May 10, 14			Sept. 13		sr	unc	May 7, 10	
	fc	May 21				yes	sr	ab	May 13, 15	yes
	fc	May 14			Sept. 20	June 5	tv, sr	fc, oc	May 5, 10	yes
	fc					yes	sr	c	Apr. 31, May 3, 10	yes
	c	May 6				yes	sr	ab	Apr. 21, 23	yes
	fc					yes				
	c				Aug. 18	yes	sr	unc		
	fc	May 6				yes				
	rare	24 Feb. '04								
	fc	Apr. 26				yes	sr	c	Mar. 15	yes
	unc		Mar.	Nov.			wv	oc		
	unc									
	c	May 16				yes	sr	ab	May 6, 11	yes
	unc	14 May '04	May 15							
	fc	May 14			Sept. 11	yes	sr	c	May 1, 3	yes
	fc	May 7, 13				yes	tv, sr	fc, rare	May 4, 6	yes
	fc	Apr. 30, May 7	May 15				tv, sr	fc, rare	Apr. 22, May 6	yes
	unc	May 13, 15				yes				
	c	Apr. 30, May 3	May 26		Aug. 15		tv, sr	c, oc	Apr. 26, May 3, 11	yes
	unc	May 26				yes				
	c	May 6, 11				May 24, June 6	tv, sr	c, unc	May 5, 7	yes
	rare									
		May 6, 17					tv, sr	fc, rare	May 4, 7	
	rare									
	c	May 3, 10			Sept. 9	yes	sr	av	Apr. 30, May 2	yes
	fc	May 5, 14					tv	fc	May 4, 18	
	c	Apr. 30, May 2, 4	May 26				tv	c	Apr. 23, May 5	
	c	Apr. 30, May 6	May 19		Sept. 10		tv	c	May 4, 18	
	rare	14 May '06								
	c	May 7, 13			Sept. 5	June	sr	c	May 3, 4	yes
	fc	May 15, 30			Sept. 10		tv	rare	May 12	
	c	May 25	May 30				tv	unc	May 16	
	fc	May 4, 10, 14	May 24	Sept. 11			tv, sr	c, oc	May 2, 5	yes
	fc, oc	May 4, 14					sr	c	Apr. 23, May 5, 7	yes
	c	Apr. 13, 27				May 17				
							tv	rare		
	unc	Apr. 13, 20, 30								
	c	May 14			Sept. 8	May 24	sr	c	May 3, 4	yes
	unc	May 11		Sept. 6			tv	oc	June 2	
	fc					yes				
	unc	May 13			Sept. 2			rare	Apr. 29	
	c	May 10			Sept. 15	yes	sr	fc	May 4, 6, 15	yes
	fc	May 15, 19				May 24, June 15				
	unc	May 14, 18	May 24	Aug. 27						
	fc	May 21, 25					tv, sr	fc, unc	May 4, 6	yes
	c	May 6, 14				yes	sr	fc	May 4, 6, 11	yes
	fc	May 4		Oct. 10						
	once, 1900									
	c	May 13				June 5	sr	c	May 1, 4	yes
		May 7, 9						unc		
	fc, local					yes	sr	fc	Apr. 27, May 4	yes
	fc	Apr. 14	May 2	Oct. 12	Nov. 1		tv, sr	unc, rare		yes
	local					June 12				
	fc, local					June 20	tv	oc		
	c	Mar. 23					tv	unc	Apr. 2	
	c						res	c		yes
	unc		May 14		Nov. 24		tv	oc		
	c					yes	res	c		yes
	once, 1904–5									
	c, oc	Mar. 23, 31					tv	fc		
	c	Apr. 13, 27	May 17		Oct. 24		tv	fc	Apr. 19, 22	
	unc	May 5				June 1	sr	fc	Apr. 30, May 8, 10	yes
	c	May 5, 14				May 24	sr	fc	May 7, 12, 24	yes
		May 24								
	fc	May 15, 27								
	c, oc	Apr. 18, 22	May 5				tv, sr	c, oc	Apr. 19, 22	yes
	ab	Feb. 28, Mar. 17				yes	sr	ab	Feb. 18, Mar. 10	yes
	ab	Feb. 23, Mar. 9			Oct. 15	yes	sr	c	Feb. 24, Mar. 16, 30	yes

SPECIES RECORDED	HOFFMAN, EASTERN N. Y., 1904		BRAISLIN, LONG ISLAND, 1907							ALBANY							ALLEGANY			
	Resident or transient	Common or rare	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Breeds
Rose-breasted grosbeak	sr	c, rare; on L. I.	tv	fc	May 3, 12			Sept. 25		tv	fc	May 10, 14			Sept. 13		sr	unc	May 7, 10	
Blue grosbeak				very rare	15 May '38															
Indigo bunting	sr	c	sr	c	Apr. 27			Oct 1	June	sr	fc	May 21				yes	sr	ab	May 13, 15	yes
Painted bunting				several spec																
Dickcissel			av				Aug. 25, Sept 20.	Oct. 10												
Lark bunting			av	once			4 Sept. '88													
Louisiana tanager																				
Scarlet tanager	sr	c	sr	c	May 8			Oct. 12		tv	fc	May 14			Sept. 20	June 5	tv, sr	fc, oc	May 5, 10	yes
Summer tanager				rare	Apr. 7, 9, 11	May 1, 14														
Purple martin	sr	local	sr	c, local	Apr. 2			Sept. 17		tv										
Cliff swallow	sr	ab, local	sr	rare			Aug. 2	Aug. 20	local	sr	fc					yes	sr	c	Apr. 31, May 3, 10	yes
Barn swallow	sr	ab	sr	c	Mar. 16			Sept. 24	May 30	sr	c	May 6				yes	sr	ab	Apr. 21, 23	yes
Tree swallow	sr	c, local	sr, tv	rare, ab	Mar. 19	May 15	July 28	Oct 28	local	sr	fc					yes				
Bank swallow	sr		sr	c, local	Apr. 28			Sept		sr	c				Aug. 18	yes	sr	unc		
Rough-winged swallow	sr, local	c, local	sr	rare	Apr. 19				June 3, 16	sr	fc	May 6				yes				
Bohemian waxwing							1830, 1832			wv	rare	24 Feb. '04								
Cedar waxwing	sr, wv	c; oc	res	c					July	sr	fc	Apr. 26				yes	sr	c	Mar. 15	yes
Northern shrike	wv	unc	wv	fc		Mar. 19	Oct. 26			wv	unc		Mar	Nov			wv	oc		
Migrant shrike	sr, tv	fc, local	tv	rare			Aug			sr	unc									
Red-eyed vireo	sr	ab	sr	ab	May 5			Oct. 31	June 1	sr	c	May 10				yes	sr	ab	May 9, 11	yes
Philadelphia vireo	tv	rare	tv	rare			Sept. 14, 18	Sept. 20, 25		tv	unc	14 May '04	May 15							
Warbling vireo	sr	fc	sr	rare, local	May 8			Sept. 16	June 11	sr	fc	May 14			Sept. 11	yes	sr	c	May 1, 3	yes
Yellow-throated vireo	sr, local		sr	fc	Apr. 23			Aug. 24	June	sr	fc	May 7, 13				yes	tv, sr	fc, rare	May 4, 6	yes
Blue-headed vireo	tv, sr, local	c	tv	unc	Apr. 30	May 7		Oct. 11		tv	fc	Apr. 30, May 7	May 15				tv, sr	fc, rare	Apr. 22, May 6	yes
Plumbeous vireo																				
White-eyed vireo	sr	c, local	sr	c	May 8			Sept. 13	June 1	sr	unc	May 13, 15				yes				
Black and white warbler	sr	c	sr	c	Apr. 19			Oct 1		tv	c	Apr. 30, May 3	May 26		Aug. 15		tv, sr	c, oc	Apr. 20, May 3, 11	yes
Prothonotary warbler			av	twice	May '40			26 Aug '86												
Worm-eating warbler	sr	fc, local	tv	rare	May 16		Aug. 28	Sept. 10, 21												
Blue-winged warbler	sr	fc, local	sr	c, local	May 2			Sept.												
Golden-winged warbler	sr	unc, local	tv	rare	May 10, 11			Aug. 29		sr	unc	May 26				yes				
Lawrence warbler				once	8 May '02															
Brewster warbler				once	16 May '02															
Nashville warbler	tv, sr	c, c, local	tv, sr (?)	rare	May 6, 9, 10	May 15, 24	Sept. 10	Sept. 26, Oct. 15		tv	c	May 6, 11				May 24, June 6	tv, sr	c, unc	May 5, 7	yes
Orange-crowned warbler			av	3			12 Oct. '02													
Tennessee warbler	tv	rare, spring, c, fall	tv	rare			Aug. 27, Sept. 8	Sept 20, Oct 3		tv	rare									
Southern parula warbler																				
Northern parula warbler	tv, sr	c, local	sr, tv	c, local, ab	May 2	May 22	Sept. 4	Oct. 1, 11	June 5	tv		May 6, 17					tv, sr	fc, rare	May 4, 7	
Cape May warbler		rare	tv	rare	May 11		Sept. 12			tv	rare									
Yellow warbler	sr	c	sr	c	Apr. 18			Sept. 20		sr	c	May 3, 10			Sept. 9	yes	sr	av	Apr 30, May 2	yes
Black-throated blue warbler	tv, sr	fc; c, local	tv	c	May 7	May 27	Aug. 20	Oct. 10		tv	fc	May 5, 13					tv	fc	May 4, 18	
Myrtle warbler	tv, sr, wv	ab; c, local; fc, local	tv, wv	c, local		May 15	Oct 5			tv	c	Apr. 30, May 2, 4	May 26				tv	c	Apr. 23, May 5	
Magnolia warbler	tv, sr	fc, local; c, local	tv	c	May 5	May 28	Aug. 27	Oct. 12		tv	c	Apr. 30, May 6	May 19		Sept. 10		tv	c	May 4, 18	
Cerulean warbler			av	once							rare	14 May '00								
Chestnut-sided warbler	sr	c	tv	c	May 1	May 28	Sept. 12	Sept. 20		r	c	May 7, 13			Sept. 5	June	sr	c	May 1, 4	yes
Bay-breasted warbler	tv	fc	tv	rare	May 16	May 29	Sept. 12	Sept. 29		tv	fc	May 15, 30			Sept. 10		tv	rare	May 12	
Black-poll warbler	tv, sr	c, local	tv	c	May 11	June 3	Sept. 9	Oct. 20		tv	c	May 25	May 30				tv	c, oc	May 2, 5	yes
Blackburnian warbler	tv, sr	fc, local; c, local	tv	fc	May 6	May 28	Sept. 5	Sept. 20		tv	fc	May 4, 10, 14	May 24	Sept. 11			tv, sr			
Yellow-throated warbler			av	once																
Black-throated green warbler	sr, tv	c; c, local	tv, sr	c, rare					May 10	tv, sr	fc, oc	May 4, 14					sr	c	Apr. 23, May 5, 7	yes
Pine warbler	sr, tv	c, local	sr	c	Apr. 7			Aug 2	May 4	sr	c	Apr. 13, 27				May 17				
Palm warbler	tv	rare, autumn	tv	rare	Apr 18		Sept. 7	Oct. 10									tv	rare		
Yellow palm warbler	tv	fc	tv	fc	Apr. 11	Apr. 30	Oct. 11	Oct. 30		tv	unc	Apr. 13, 20, 30								
Prairie warbler	sr	c, local; rare, local	tv	fc	May 2			Sept. 11	late June								sr	c	May 1, 4	yes
Ovenbird	sr	c	sr	c	Apr. 19			Oct. 3		sr	c	May 14			Sept. 8	May 24	tv	oc	June 2	
Water thrush	sr, local, tv, local		tv	c	May 7	May 27	Aug. 14, 20	Oct. 11		tv	unc	May 11		Sept. 6						
Grinnell water-thrush			av	once												yes				
Louisiana water thrush	sr	fc, local	sr	rare						sr	fc									
Kentucky warbler	sr	fc, local	sr ( )	very rare	May 18			Aug 18												
Connecticut warbler	tv	rare, fall	tv	fc, fall			Sept. 4	Oct. 12										rare	Apr 29	
Mourning warbler	r, local; tv, local		tv	rare, twice						tv	unc	May 13			Sept 2			fc	May 4, 6, 15	yes
Northern yellow-throat	sr		sr	c	May 1			Oct. 25	May 30	sr	c	May 10			Sept. 15	yes	sr			
Yellow-breasted chat	sr	c, local	sr	c, local	May 2			Oct 2		sr	fc	May 15, 19				May 24, June 15				
Hooded warbler	sr, local			rare	Apr. 30	May 16	Aug. 28	Sept. 2												
Wilson warbler	tv	unc	tv	rare						tv	unc	May 14, 18	May 24	Aug. 27			tv, sr	fc, unc	May 4, 6	yes
Canadian warbler	sr, local, tv, local		tv	c	May 17	June 3	Aug. 21	Sept 5		tv	fc	May 21, 25				yes	sr	fc	May 4, 6, 11	yes
American redstart	sr	c	sr	c	May 7			Sept. 28	June 15	sr	c	May 6, 14								
American pipit	tv	c, fall; rare, spring	tv	fc	Apr. 12		Oct 8	Nov. 27		tv	fc	May 4		Oct. 10					May 1, 4	yes
Mockingbird	av, local		sr	very rare				Nov		av	once, 1900					June 5	sr	c		
Catbird	sr	c	sr, wv	c, very rare	May 2			Oct. 26	May 25	sr								unc		
Brown thrasher	sr	c, local	sr, wv	c, oc	Apr. 20			Oct 20		tv, sr	c	May 13				yes		fc	Apr. 27, May 4	yes
Carolina wren	sr	fc, local	res	rare					yes			May 7, 9					sr	unc, rare		yes
House wren	sr	c, local	sr	c	May 6			Oct. 6		sr	fc, local						tv, sr			
Winter wren	sr, wv	c, local, fc, local	tv, wv	fc, rare						tv	fc	Apr. 14	May 2	Oct. 12	Nov. 1	June 12				
Short-billed marsh wren	sr	rare, local		once						sr	local					June 20	tv		Apr. 2	
Long-billed marsh wren	sr	c, local	sr	ab, local	May 4			Oct. 8		sr	fc, local						tv	unc		yes
Brown creeper	sr, local, wv, local		wv	c		Apr. 12	Oct. 6			tv	c	Mar 23					res	c		
White-breasted nuthatch	sr, res, local		res	c						tv	c				Nov. 24		tv	oc		
Red-breasted nuthatch	tv, res	irreg, ab, local	wv	fc		Apr. 20	July 20			tv	unc		May 14							
Brown-headed nuthatch																				yes
Tufted titmouse	res, local			rare	14 Mar. '98												res	c		
Chickadee	res		res	c					yes	res	c					yes				
Carolina chickadee																	tv	fc	Apr. 19, 22	
Hudsonian chickadee	res, local		wv							wv	once, 1904–5						tv	fc		
Golden-crowned kinglet	sr	c, local	tv	c		Apr. 13	Oct. 10			tv, wv	c, oc	Mar. 23, 31			Oct. 24					
Ruby-crowned kinglet	tv	fc	tv		Apr. 5	May 7	Sept 25	Oct. 12		tv	c	Apr. 13, 27	May 17						Apr 30 May 8, 10	yes
Blue-gray gnatcatcher				4 times	18 Apr. '74		2 Sept. '85										sr	fc	May 7, 12, 24	yes
Townsend solitaire			av				25 Nov. '05									June 1	sr	fc		
Wood thrush	sr	c, local	sr	c	May 4			Sept. 26		r	unc	May 5				May 24				
Wilson thrush	sr	c	sr	unc	Apr. 11			Oct 15		r	c	May 5, 14								
Gray-cheeked thrush	tv		tv	c	May 11	May 30	Sept. 26	Oct. 12		tv		May 24								
Bicknell thrush	sr, local		tv	fc			Sept. 18	Oct. 21		tv	fc	May 15, 27					tv, sr	c, oc	Apr. 19, 22	yes
Olive-backed thrush	sr, local		tv	c	Apr. 30	May 17	Sept. 4	Oct. 30		tv, sr	c, oc	Apr. 18, 22	May 5			yes	sr	ab	Feb 18, Mar. 10	yes
Hermit thrush	sr, wv	c, local, oc, local	tv	c	Apr. 10	May 6	Sept 14	Dec. 1		r	ab	Feb. 28, Mar. 17								
American robin	r, res	c, c, local	sr wv	ab, oc	Feb. 24			Dec. 23												
Varied thrush			av	1			19 Nov. '05										sr	c	Feb 24, Mar. 10, 30	yes
Wheatear			av	several																
Bluebird	sr, res, local	c	sr, wv	unc, oc	Mar. 14			Nov. 28		r	ab	Feb. 23, Mar. 9			Oct. 15	yes				

SPECIES RECORDED	BROOME						CATTARAUGUS			
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Br
Rose-breasted grosbeak	tv	fc	May 4, 7				sr	unc		
Blue grosbeak										
Indigo bunting	sr	ab	May 8, 11			yes	sr	c	May 12	yes
Painted bunting										
Dickcissel										
Lark bunting										
Louisiana tanager										
Scarlet tanager	sr	fc	May 4, 8			yes	sr	fc	May 8, 9	yes
Summer tanager							sv	rare		
Purple martin	sr	rare					sr	local		
Cliff swallow	sr	local	Apr. 23, May 1			yes	sr	c	Apr. 20, 28	yes
Barn swallow	sr	c	Apr. 22			yes	sr	c	Apr. 20	yes
Tree swallow	sr	c	Apr. 13			yes	sr	unc		
Bank swallow	sr	c	May 5			yes	sr	c	May 7	yes
Rough-winged swallow										
Bohemian waxwing							wv	rare		
Cedar waxwing	sr	c	Apr. 7			yes	sr	c		yes
Northern shrike	wv	oc					wv	oc		
Migrant shrike	tv	oc					sr	unc		yes
Red-eyed vireo	sr	ab	May 6, 8			yes	sr	ab	May 12	yes
Philadelphia vireo										
Warbling vireo	sr	c	Apr. 29, May 2			yes	sr	fc	May 5	yes
Yellow-throated vireo	tv, sr	fc, oc	May 3, 5			yes	sr	unc		
Blue-headed vireo	tv	unc								
Plumbeous vireo										
White-eyed vireo	sr	fc				yes				
Black and white warbler	tv, sr	ab unc	Apr. 20, May 3, 6			yes	tv, sr	c unc	May 4	
Prothonotary warbler			9 May '05							
Worm-eating warbler	tv	unc	May 9, 14		Oct. 5					
Blue-winged warbler	tv	fc	May 14		5 Oct. '09					
Golden-winged warbler										
Lawrence warbler										
Brewster warbler										
Nashville warbler	tv	fc	May 7, 8	May 16, 20						
Orange-crowned warbler										
Tennessee warbler										
Southern parula warbler										
Northern parula warbler	tv	unc	May 6, 8	May 12						
Cape May warbler	tv	rare	May 8							
Yellow warbler	sr	c	Apr. 29, May 1			yes	sr	c	Apr. 27, May 2	yes
Black-throated blue warbler	tv, sr	c, oc	May 3, 7			yes	tv, sr	fc, oc	May 5	
Myrtle warbler	tv	ab	Apr. 23, 30				tv	c		
Magnolia warbler	tv	fc	May 5, 11	May 14, 26			tv, sr	fc, oc		
Cerulean warbler										
Chestnut-sided warbler	sr	c	May 3, 5			yes	sr	fc		yes
Bay-breasted warbler	tv	unc	May 11, 13				tv	unc	May 14	
Black-poll warbler	tv	c	May 16, 17	May 24						
Blackburnian warbler	tv	fc	May 2, 6	May 16			tv, sr	fc, oc	May 10	
Yellow-throated warbler										
Black-throated green warbler	sr	c	Apr. 29, May 3			yes	sr	fc		
Pine warbler	tv	fc	May 10, 13	May 24						
Palm warbler	tv	rare	Apr. 28, May 3				tv	oc	May 1	
Yellow palm warbler										
Prairie warbler										
Ovenbird	sr	ab	Apr. 29, May 3, 14			yes	sr	c	May 4	yes
Water-thrush	tv	rare					tv	unc		
Grinnell water-thrush										
Louisiana water-thrush										
Kentucky warbler	sr	local	May 13							
Connecticut warbler	tv	rare	May 3, 4, 11							
Mourning warbler							sr	unc		
Northern yellow-throat	sr	c	May 4, 6, 18			yes	sr	fc	May 8	yes
Yellow-breasted chat	sr	c, local	May 5, 18			yes				
Hooded warbler										
Wilson warbler	tv	unc	May 9, 12	May 24						
Canadian warbler	tv	fc	May 9, 11				tv, sr	fc, unc	May 12	yes
American redstart	sr	c	May 4, 7			yes	sr	fc	May 12	yes
American pipit										
Mockingbird							av			
Catbird	sr	ab	May 2, 5			yes	sr	ab	May 7	yes
Brown thrasher	sr	c	Apr. 26, 30			yes	sr	local		yes
Carolina wren							av		Mar. 11	
House wren	sr	fc	Apr. 30, May 8			yes	sr	fc	May 10	yes
Winter wren	tv	oc	May 3				tv	unc		
Short-billed marsh wren										
Long-billed marsh wren	sr	fc, local				yes	sr	c, local		yes
Brown creeper	tv	fc	Mar. 27, Apr. 2				tv, wv	fc, oc		
White-breasted nuthatch	res	c				yes	res	c		yes
Red-breasted nuthatch	tv	oc	Mar. 27	May 27			tv	fc		
Brown-headed nuthatch										
Tufted titmouse										
Chickadee	res	ab				yes	res	c		yes
Carolina chickadee										
Hudsonian chickadee										
Golden-crowned kinglet	tv	c	Mar. 30	Apr. 29			tv	fc		
Ruby-crowned kinglet	tv	fc	Apr. 14, 19	May 2			tv	fc		
Blue-gray gnatcatcher										
Townsend solitaire										
Wood thrush	sr	fc	May 3, 8			yes	sr	fc		yes
Wilson thrush	sr	c	May 3, 9			yes	sr	fc		yes
Gray-cheeked thrush	tv	unc	May 18							
Bicknell thrush										
Olive-backed thrush	tv	fc	May 7, 11	May 18			tv	unc		
Hermit thrush	tv	fc	Apr. 1, 12	May 29			tv	fc		
American robin	sr	ab	Mar. 1, 15			yes	sr	ab	Mar. 10	yes
Varied thrush										
Wheatear										
Bluebird	sr	c	Feb. 24, Mar. 6			yes	sr	c	Mar. 10	yes

	CAYUGA						CHAUTAUQUA					
	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Returns from north	Departs for south	Breeds
	fc	May 6, 10				yes	sr	fc	May 10			yes
	c	May 8, 15				yes	sr	c	May 10, 12			yes
	fc	May 8, 12				yes	sr	fc	May 7			yes
								rare, 1 June '00				
	unc	Apr. 3, 12, 23			Aug. 11, 20, 28	yes	sr	unc				yes
	c	Apr. 15, 25				yes	sr	ab	May 10			yes
	c	Apr. 15, 22			Sept. 15	yes	sr	ab				yes
	unc, ab	Apr. 10				yes	tv, sr	c, oc				
	fc	Apr. 25, 30				yes	sr	ab	May 8			yes
	fc	Apr. 22, 25, 30			Aug. 8	yes						
	rare			4 Feb. '96								
	ab, fc	Mar. 6, Apr. 1			Oct.	yes	sr	c				yes
	unc		Apr. 5				wv	unc				
	unc	Mar. 17, 30, Apr. 10			Sept. 26	yes	sr	fc	Apr. 27			yes
	ab	May 6, 10			Sept. 27	yes	sr	ab	May 8, 10			yes
	oc	May 16							May 12			
	c	Apr. 25, 30				yes	sr	fc	May 1			yes
	fc	Apr. 1, 6				yes	sr	fc	May 7			yes
	unc	Apr. 23, May 4, 10			Oct. 6		tv, sr	fc, rare	May 2, 5			yes (?)
							sr	unc	May 8			yes
	c	Apr, 27, 30					tv, sr	c, unc	Apr. 30			
	unc					yes						
	c	Apr. 30, May 3	May 10				tv					
	rare	15 May '99	17 May '00	Oct. 6	Oct. 12							
		May 16	May 30	Sept. 18								
	unc	May 6, 8					tv	unc				
	rare	11 May '00, May 13	May 18				tv					
	ab	Apr. 29, May 2				yes	sr	ab	Apr. 29			yes
	c	Apr. 30, May 8	June 20				tv, sr	c, oc	May 7			
	c	Apr. 24, 30	May 18, 22	Sept. 20	Oct. 20		tv	c	Apr. 15	Sept. 15		
	fc	May 4, 8	June 5			yes	tv, sr	fc, local	May 7, 10	Sept. 15		yes
	local	May 2, 16, 25				yes						
	c	May 3, 11					sr	fc	May 7, 10			yes
	unc	May 13, 15	May 25				tv	fc	May 9, 12	Sept. 10		
	c	May 9, 15	May 30				tv	fc	May 20		Oct. 20	
	fc	May 3, 10	May 21				tv, sr	fc, rare	May 7, 12	Sept. 10		yes
	c	May 3 6					sr	c, local				
	rare, local	Apr. 5, 29										
	rare	Apr. 27					tv		May 4			
							tv	rare	Apr. 27			
	c	May 3, 6				yes	sr	c	May 5, 10			yes
	fc, oc	Apr. 28, May 2				yes	tv, sr	fc, oc				
	local	Apr. 20										
	fall			Sept. 7	Sept. 17							
	fc	May 10, June 20				yes	tv, sr	unc, oc	May 9			
	c	May 3, 8				yes	sr	c	May 9			yes
	c, local	May 10			Sept. 20	July 25, 26	sr	fc	May 10, 14			yes
	unc	May 14, 17	May 25									
	c	May 9, 12	May 25				tv, sr	fc, local				
	c	May 4, 8				yes	sr	c	May 7, 10			yes
	fc, fall			Sept. 25								
							sr	rare				yes
	ab	May 5, 8			Sept. 27	yes	sr	ab	Apr. 25, 30		Oct.	yes
	fc, local	Apr. 24, 30				yes	sr	fc	Apr. 24, 26		Aug. 20	yes
	fc	Apr. 26, May 2			Oct. 17	yes	sr	c	Apr. 28			yes
	fc	Mar. 22, Apr. 10					tv	oc				
	rare				2 Oct. '98	yes						
	c, oc	Apr. 20				May 20	sr	fc	May			yes
	c, unc	Mar. 3, 30	May 10	Sept. 25			tv	fc	Apr			
	c					yes	res	c				
	fc, oc	Apr. 15	May 5, 11				wv	oc				
								rare	21 May '91			
	c					yes	res	ab				yes
	ab, unc	Mar. 12, 30	Apr. 30	Oct. 10, 15	Oct. 25		tv, wv	ab, fc			Oct. 1	
	fc	Apr. 1, 20	May 7				tv	fc				
	once											
	fc	May 6, 9				yes	sr	c	May 5, 8		Sept. 10	yes
	ab	May 6, 8			Aug. 30, Sept. 20	yes	sr	c	May 2		Aug. 26	yes
	unc			Sept. 20								
	c	May 14, 16					tv	oc	May 7, 14			
	c	Apr. 10, 17	May 10, 14				tv		Apr. 8			
	ab	Feb. 24, Mar. 10, 18			Oct. 20	yes	sr	ab	Mar. 21			yes
	c	Mar. 15, 22			Oct. 16	yes	sr	fc	Mar. 30			yes

SPECIES RECORDED	BROOME						CATTARAUGUS				CAYUGA							CHAUTAUQUA					
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Returns from north	Departs for south	Breeds
Rose-breasted grosbeak	tv	fc	May 4, 7				sr	unc			sr	fc	May 6, 10				yes	sr	fc	May 10			yes
Blue grosbeak																							
Indigo bunting	sr	ab	May 8, 11			yes	sr	c	May 12	yes	sr	c	May 8, 15				yes	sr	c	May 12, 13			yes
Painted bunting																							
Dickcissel																							
Lark bunting																							
Louisiana tanager																							
Scarlet tanager	sr	fc	May 4, 8			yes	sr	fc	May 8, 9	yes	sr	fc	May 8, 12				yes	sr	fc	May 7			yes
Summer tanager							sv	rare											rare, 1 June '00				
Purple martin	sr	rare					sr	local			sr	unc	Apr. 3, 12, 23			Aug. 11, 20, 28	yes	sr	unc				yes
Cliff swallow	sr	local	Apr. 23, May 1			yes	sr	c	Apr. 20, 28	yes	sr	c	Apr. 15, 25				yes	sr	ab	May 1			yes
Barn swallow	sr	c	Apr. 22			yes	sr	c	Apr. 20	yes	sr	c	Apr. 15, 22			Sept. 15	yes	sr	ab				yes
Tree swallow	sr	c	Apr. 13			yes	sr	unc		yes	sr, tv	unc, ab	Apr. 10				yes	tv, sr	c, oc				
Bank swallow	sr	c	May 5			yes	sr	c	May 7	yes	sr	fc	Apr. 25, 30				yes	sr	ab	May 8			yes
Rough-winged swallow											sr	fc	Apr. 22, 25, 30			Aug. 8	yes						
Bohemian waxwing							wv	rare			wv	rare			4 Feb. '96								
Cedar waxwing	sr	c	Apr. 7			yes	sr	c		yes	sr, res	ab, fc	Mar. 6, Apr. 1			Oct	yes	sr	c				yes
Northern shrike	wv	oc					wv	oc			wv	unc		Apr. 5				wv	unc				
Migrant shrike	tv	oc					sr	unc			sr	unc	Mar. 17, 30, Apr. 10			Sept. 26	yes	sr	fc	Apr. 27			yes
Red-eyed vireo	sr	ab	May 6, 8			yes	sr	ab	May 12	yes	sr	ab	May 6, 10			Sept. 27	yes	sr	ab	May 8, 10			yes
Philadelphia vireo											tv	oc	May 16							May 12			
Warbling vireo	sr	c	Apr. 29, May 2			yes	sr	fc	May 5	yes	sr	c	Apr. 25, 30				yes	sr	fc	May 1			yes
Yellow-throated vireo	tv, sr	fc, oc	May 3, 5			yes	sr	unc			sr	fc	Apr. 1, 6				yes	sr	fc	May 7			yes
Blue-headed vireo	tv	unc									tv	unc	Apr. 23, May 4, 10			Oct 6		tv, sr	fc, rare	May 2, 5			yes ( )
Plumbeous vireo																							
White-eyed vireo	sr	fc				yes												sr	unc	May 8			yes
Black and white warbler	tv, sr	ab unc	Apr. 20, May 3, 6			yes	tv, sr	c unc	May 4		tv	c	Apr. 27, 30					tv, sr	c, unc	Apr 30			
Prothonotary warbler			9 May '05																				
Worm-eating warbler	tv	unc	May 9, 14		Oct. 5																		
Blue-winged warbler	tv	fc	May 14		5 Oct. '09																		
Golden-winged warbler											sr	unc					yes						
Lawrence warbler																							
Brewster warbler																							
Nashville warbler	tv	fc	May 7, 8	May 16 20							tv	c	Apr. 30 May 3	May 10				tv					
Orange-crowned warbler											tv	rare	15 May '99	17 May '00	Oct. 6	Oct 12							
Tennessee warbler											tv		May 16	May 30	Sept. 18								
Southern parula warbler																		tv	unc				
Northern parula warbler	tv	unc	May 6, 8	May 12							tv	unc	May 6, 8					tv					
Cape May warbler	tv	rare	May 8								tv	rare	11 May '00, May 13	May 18				sr	ab	Apr 29			yes
Yellow warbler	sr	c	Apr. 29, May 1			yes	sr	c	Apr. 27, May 2	yes	sr	ab	Apr. 29, May 2				yes	tv, sr	c, oc	May 7			
Black-throated blue warbler	tv, sr	c, oc	May 3, 7			yes	tv, sr	fc, oc	May 5		tv	c	Apr. 30, May 8	June 20				tv	c	Apr. 15	Sept 15		yes
Myrtle warbler	tv	ab	Apr. 23, 30				tv	c			tv	c	Apr. 24, 30	May 18, 22	Sept. 20	Oct. 20		tv, sr	fc, local	May 7, 10	Sept. 15		
Magnolia warbler	tv	fc	May 5, 11	May 14, 26			tv, sr	fc, oc			tv	fc	May 4, 8	June 5			yes						yes
Cerulean warbler											sr	local	May 2, 16, 25					sr	fc	May 7, 10			
Chestnut sided warbler	sr	c	May 3, 5			yes	sr	fc		yes	tv	c	May 3, 11					tv	fc	May 9, 12	Sept. 10		
Bay-breasted warbler	tv	unc	May 11, 13				tv	unc	May 14		tv	unc	May 13, 15	May 25				tv	fc	May 20		Oct 20	
Black-poll warbler	tv	c	May 16, 17	May 24							tv	c	May 9, 15	May 30				tv, sr	fc, rare	May 7, 12	Sept. 10		yes
Blackburnian warbler	tv	fc	May 2, 6	May 16			tv, sr	fc, oc	May 10		tv	fc	May 3, 10	May 21									
Yellow-throated warbler																		sr	c, local				
Black-throated green warbler	sr	c	Apr. 29, May 3			yes	sr	fc			tv	c	May 5, 6										
Pine warbler	tv	fc	May 10, 13	May 24							tv, sr	rare, local	Apr. 5, 29					tv		May 4			
Palm warbler	tv	rare	Apr. 28, May 3				tv	oc	May 1		tv	rare	Apr. 27					tv	rare	Apr 27			
Yellow palm warbler											tv												
Prairie warbler																			c	May 5, 10			yes
Ovenbird	sr	ab	Apr. 29, May 3, 14			yes	sr	c	May 4	yes	sr	c	May 3, 6				yes	sr					
Water-thrush	tv	rare					tv	unc			tv, sr	fc, oc	Apr. 28, May 2				yes	tv, sr	fc, oc				
Grinnell water-thrush																							
Louisiana water thrush											sr	local	Apr. 20										
Kentucky warbler	sr	local	May 13																				
Connecticut warbler	tv	rare	May 3, 4, 11								tv	fall			Sept. 7	Sept. 17				May 9			
Mourning warbler											tv, sr	fc	May 10, June 20				yes	tv, sr	unc, oc	May 9			yes
Northern yellow throat	sr	c	May 4, 6, 18				sr	unc			sr	c	May 3, 8				yes	sr					
Yellow-breasted chat	sr	c, local	May 5, 18			yes	sr	fc	May 8	yes									fc	May 10, 14			yes
Hooded warbler						yes					sr	c, local	May 10			Sept. 20	July 25, 26	sr					
Wilson warbler	tv	unc	May 9, 12	May 24							tv	unc	May 14, 17	May 25				tv, sr	fc, local				
Canadian warbler	tv	fc	May 9, 11								tv	c	May 9, 12	May 25						May 7, 10			yes
American redstart	sr	c	May 4, 7				tv, sr	fc, unc	May 12	yes	r	c	May 4, 8				yes	sr	c				
American pipit						yes	sr	fc	May 12	yes	tv	fc, fall			Sept. 25								yes
Mockingbird																		sr	rare	Apr. 25, 30		Oct	yes
Catbird	sr	ab	May 2, 5				av											sr	ab	Apr. 24, 26		Aug 20	yes
Brown thrasher	sr	c	Apr. 26, 30			yes	sr	ab	May 7	yes	sr	ab	May 5, 8			Sept. 27	yes	sr	fc				
Carolina wren						yes	sr	local		yes	tv, sr	fc, local	Apr. 24, 30				yes			Apr. 28			yes
House wren	sr	fc	Apr 30, May 8			yes	av		Mar. 11									sr	c				
Winter wren	tv	oc	May 3			yes	sr	fc	May 10	yes	sr	fc	Apr. 26, May 2			Oct. 17	yes	tv	oc				
Short-billed marsh wren							tv	unc			tv	fc	Mar. 22, Apr. 10										yes
Long-billed marsh wren	sr	fc, local									sr	rare				2 Oct. '98	yes		fc	May			
Brown creeper	tv	fc	Mar 27, Apr. 2			yes	sr	c, local		yes	sr, res	c, oc	Apr. 20				May 20	sr	fc	Apr.			
White-breasted nuthatch	res	c					tv, wv	fc, oc			tv, res	c, unc	Mar. 3, 30	May 10	Sept. 25		yes	tv					
Red-breasted nuthatch	tv	oc	Mar. 27	May 27		yes	res			yes	res	c						res	c				
Brown-headed nuthatch							tv	fc			tv, wv	fc, oc	Apr. 15	May 5, 11				wv	oc				
Tufted titmouse																				21 May '01			
Chickadee	res	ab															yes	res	rare				yes
Carolina chickadee						yes	res	c		yes	res	c							ab				
Hudsonian chickadee																						Oct 1	
Golden-crowned kinglet	tv	c	Mar. 30	Apr 29							tv, wv	ab, unc	Mar. 12, 30	Apr. 30	Oct 10, 15	Oct 25		tv, wv	ab, fc				
Ruby-crowned kinglet	tv	fc	Apr 14, 19	May 2			tv	fc			tv	fc	Apr. 1, 20	May 7				tv	fc				
Blue-gray gnatcatcher							tv	fc			tv	once											
Townsend solitaire																				May 5, 8		Sept 10	yes
Wood thrush	sr	fc	May 1, 8								sr	fc	May 6, 9				yes	sr		May 2		Aug 20	yes
Wilson thrush	sr	c	May 1, 9			yes	sr	fc		yes	r	ab	May 6, 8			Aug. 30, Sept 20	yes	sr					
Gray-cheeked thrush	tv	unc	May 18			yes	sr	fc		yes	tv	unc			Sept. 20								
Bicknell thrush																		tv		May 7, 14			
Olive-backed thrush	tv	fc	May 7, 11	May 18							tv	c	May 14, 16					tv		Apr 8			
Hermit thrush	tv	fc	Apr 1, 12	May 29			tv	unc			tv	c	Apr. 10, 17	May 10, 14				sr	ab	Mar 21			yes
American robin	sr	ab	Mar 1, 15				tv	fc			sr	ab	Feb. 24, Mar. 10, 18			Oct. 20	yes						
Varied thrush						yes	sr	ab	Mar. 10	yes													
Wheatear																			fc	Mar. 10			yes
Bluebird	sr	c	Feb. 24, Mar. 6			yes	sr	c	Mar. 10	yes	sr	c	Mar. 15, 22			Oct. 16	yes	sr					

SPECIES RECORDED	CHEMUNG					CHENANGO				
	Resident or transient	Common or rare	Arrives from south	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Departs for south	Br
Rose-breasted grosbeak	sr	unc	May 9, 10		yes					
Blue grosbeak										
Indigo bunting	sr	c	May 12, 14		yes	sr	fc			yes
Painted bunting										
Dickcissel										
Lark bunting										
Louisiana tanager										
Scarlet tanager	sr		May 4, 7			sr	c			yes
Summer tanager										
Purple martin						sr	fc			yes
Cliff swallow						sr	fc			yes
Barn swallow	sr	c	Apr. 13, 20		yes	sr	c	Apr. 19		yes
Tree swallow		unc	Apr. 25			sr	oc			yes
Bank swallow	sr		May		yes	sr	c	May 10		yes
Rough-winged swallow	sr	fc	May 4, 10		yes	sr	oc			yes
Bohemian waxwing										
Cedar waxwing	sr	c	Mar. 28		yes	sr	c	Mar. 15		yes
Northern shrike	wv	unc				wv	rare			
Migrant shrike										
Red-eyed vireo	sr	c	May 2, 12		yes	sr	c			yes
Philadelphia vireo										
Warbling vireo	sr		May 7		yes	sr	fc			yes
Yellow-throated vireo	sr					sr	fc	May 10		yes
Blue-headed vireo	tv		May 4							
Plumbeous vireo										
White-eyed vireo						sr	fc			yes
Black and white warbler	sr	c	Apr. 30, May 2		yes	sr	c	May 6		yes
Prothonotary warbler										
Worm-eating warbler										
Blue-winged warbler		rare	May 22			tv		May 6		
Golden-winged warbler		rare	May 22							
Lawrence warbler										
Brewster warbler										
Nashville warbler	tv					tv, sr	—, fc			yes
Orange-crowned warbler										
Tennessee warbler										
Southern parula warbler										
Northern parula warbler	tv		May 10, 13			tv		May 21		
Cape May warbler										
Yellow warbler	sr	c	Apr. 29, May 3		yes	sr	c	May 2	Sept. 26	yes
Black-throated blue warbler	tv	fc	May 1, 3			tv, sr	c	May 10	Sept. 21	yes
Myrtle warbler	tv	c	Apr. 24, 30			tv	c	May 6	Oct. 12, Nov. 3	
Magnolia warbler	tv	fc	May 3, 12			tv	unc	May 15		
Cerulean warbler										
Chestnut-sided warbler	tv, sr	c, oc	May 4, 8		yes	tv, sr	unc, ab	May 15		yes
Bay-breasted warbler	tv	fc	May 15, 17, June 6							
Black-poll warbler	tv		May 18, 20			tv	c	May 21		
Blackburnian warbler	tv	c	May 1, 3			tv		May 6		
Yellow-throated warbler										
Black-throated green warbler										
Pine warbler										
Palm warbler	tv		May							
Yellow palm warbler										
Prairie warbler										
Ovenbird	sr	c	May 2, 6		yes	sr	c			yes
Water-thrush	tv		Apr. 27							
Grinnell water-thrush										
Louisiana water-thrush										
Kentucky warbler										
Connecticut warbler										
Mourning warbler										
Northern yellow-throat	sr	c	May 2, 6		yes	sr	c	May 6		yes
Yellow-breasted chat	sr	c	May 7, 14		yes	sr	oc			yes
Hooded warbler	sr	?			?					
Wilson warbler	tv		May 20			tv				
Canadian warbler	tv		May 14			tv		May 21		
American redstart	sr	c	May 1, 5		yes	sr	ab	May 7		May 2
American pipit										
Mockingbird										
Catbird	sr	c	Apr. 26, 30		yes	sr	ab	May 3, 7		May 2
Brown thrasher	sr	c	May 1, 3			sr	rare			yes
Carolina wren										
House wren	sr				yes	sr	fc	May 10	Oct. 5	yes
Winter wren										
Short-billed marsh wren										
Long-billed marsh wren										
Brown creeper	tv		Apr. 2, 12			tv				
White-breasted nuthatch	res	c			yes	res	c			yes
Red-breasted nuthatch	tv		Mar. 2, May 5							
Brown-headed nuthatch	av		24 May '88							
Tufted titmouse										
Chickadee	res	c			yes	res	c			May 1
Carolina chickadee										
Hudsonian chickadee										
Golden-crowned kinglet	tv	c	Apr. 2, 12			tv	c		Oct. 19	
Ruby-crowned kinglet	tv	fc	Apr. 22	Oct. 26		tv	fc	Apr. 29	Oct. 11, 19	
Blue-gray gnatcatcher										
Townsend solitaire										
Wood thrush	sr	c			yes	sr	rare			yes
Wilson thrush	sr	c	Apr. 25, May 4		yes	sr	ab			
Gray-cheeked thrush										
Bicknell thrush										
Olive-backed thrush										
Hermit thrush						sr	fc			yes
American robin	sr	ab	Mar. 7, 12		yes	sr	ab	Mar. 8, 15		yes
Varied thrush										
Wheatear										
Bluebird	sr	fc	Mar. 8, 14		yes	sr	c	Mar. 20		Apr. 2

CLINTON		COLUMBIA				CORTLAND						
ent	Common or rare	Resident or transient	Common or rare	Arrives from south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds
	unc, May 10	sr			yes	sr	c	May 10			Sept. 25	May 22, 30
		sr	c	May 14	yes	sr	c	May 10			Sept. 25	June 10
		sr		May 4, 12		sr	fc	May 12, 14			Sept	May 30
						av	once	11 May '00				
	unc, local	sr			yes	sr	rare					yes
	c	sr	c	May 13	yes	sr	ab	Apr. 25, 27			Sept. 1	yes
	c	sr	c	Apr. 21	yes	sr	ab	Apr. 18, 20			Sept	yes
	c	tv				sr	fc					May 21
	unc	sr	c	Apr. 30	yes	sr	c	May 1			Sept. 5	yes
						sr	rare					yes
	c	sr, res	c, oc	Feb. 4, Apr. 18	yes	sr, res	c, oc	Mar. 30				June 15, July
		wv				wv	c		Apr. 1	Nov. 1		
	unc	sr	fc	Apr. 8		sr	rare	Apr. 8				
	c	sr	c	May 4, 12	yes	sr	ab	May 8			Sept	June 10
	fc	sr			yes	sr	c	May 3, 5				yes
	unc	sr	unc		yes	sr	fc	May 8				yes
	unc					tv	rare	May 8, 10				
	c	tv		May 4, 6		tv	fc	May 2, 8, 10	May 14			
		tv	unc	May 8, 14								
	fc	tv	c	May 8		tv, sr	fc, rare	May 3, 5, 11				25 May '06
		tv		May 15								
		tv		May 9		tv, sr	fc, rare	May 8				
						tv	rare					
	c	sr	c		yes	sr	ab	Apr. 28, May 1			Oct. 1	May 18, 30
	c	tv				tv, sr	c, fc	May 12, 15				June 1, 6
	c	tv	c	May 8		tv	ab	Apr. 26, May 4	May 15	Oct. 5	Oct. 18	
	fc	tv	fc	May 8, 12		tv, sr	c, fc	May 10				May 27, June 10
						tv	rare					
	c	tv, sr	c, fc	May 8	yes	sr	c	May 6, 8				May 25, June 10
		tv		May 14, 16		tv	fc	May 11, 13				
	fc	tv		May 19		tv	fc	May 15, 17		Sept. 25	Oct	
	fc	tv	unc	May 13		tv	ab, irreg.	Apr. 28, May 8	May 21, 22	Sept		
	c	tv	c	May 5		tv, sr	c, fc	May 1, 8				June 1, 8
		tv		May 22		sr	unc, local					
	c	sr	c		yes	sr	ab	May 9, 10			Sept. 15, 20	2 broods
	fc	tv	fc			sr	rare					
						sr	rare					27 June '03, 11 June '06
	unc					sr	fc	May 9				June 3
	c	sr	c	May 12	yes	sr	c	May 8, 10, 15			Sept	yes
		sr			yes	sr	rare					June 10, 25
						sr	fc	May 8, 12				June 5, 12
						tv	fc	May 16	May 20			
	fc	tv				sr, tv	fc, c	May 11, 20				yes
	c	sr		May 10		sr	c	May 1, 5, 11			Sept	May 25
	fc	sr	c	May 8	yes	sr	ab	May 6, 8			Oct. 1	May 20, 30
	local	sr				sr	fc					yes
		sr			yes	sr	fc	Apr. 30			Oct. 15	yes
	fc					tv	unc					
						tv	rare					
						sr	local					yes
	c	tv, sr	c, fc		yes	tv, wv	fc, oc	Apr	May 8		Oct	
	unc	res				res	ab					May 8
	fc	tv				tv, wv	c, oc	Apr. 17	Apr. 21			
	c	res			yes	res	ab					May 15
	c	tv				tv	c	Apr	Apr. 15		Oct	
	fc	tv	fc	Apr		tv	fc	Apr			Oct	
		sr			yes	sr	c	Apr. 30			Oct. 1	yes
	c	sr	c		yes	sr	c	May 1, 8			Sept. 1	yes
	c, fc											
	c	tv, sr	c, local			tv	fc	Mar. 29, Apr. 10				
	c	sr	c	Mar. 18	yes	sr, res	ab, oc	Feb. 27, Mar. 10, 15			Nov. 1	2 broods
	fc	sr	c	Mar. 15	yes	sr	c	Mar. 10, 20			Nov. 1	2 broods

SPECIES RECORDED	CHEMUNG					CHENANGO					* CLINTON		COLUMBIA				CORTLAND						
	Resident or transient	Common or rare	Arrives from south	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Departs for south	Breeds	Resident or transient	Common or rare	Resident or transient	Common or rare	Arrives from south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds
Rose-breasted grosbeak	sr	unc	May 9, 10		yes						sr	unc, May 10	sr			yes	sr	c	May 10			Sept. 25	May 22, 30
Blue grosbeak																							
Indigo bunting	sr	c	May 12, 14		yes	sr	fc			yes			sr	c	May 14	yes	sr	c	May 10			Sept. 25	June 1
Painted bunting																							
Dickcissel																							
Lark bunting																							
Louisiana tanager																							
Scarlet tanager	sr		May 4, 7			sr	c			yes			sr		May 4, 12		sr	fc	May 12, 14			Sept.	May
Summer tanager																	av	once	11 May '00				
Purple martin						sr	fc			yes	sr	unc, local	sr			yes	sr	rare					yes
Cliff swallow						sr	fc			yes	sr	c	sr	c	May 13	yes	sr	ab	Apr. 25, 27			Sept. 1	yes
Barn swallow	sr	c	Apr. 14, 20		yes	sr	c	Apr. 19		yes	sr	c	sr	c	Apr. 21	yes	sr	ab	Apr. 18, 20			Sept.	yes
Tree swallow		unc	Apr. 25			sr	oc			yes	sr	c	tv				sr	fc					May 21
Bank swallow	sr		May		yes	sr	c	May 10		yes	sr	unc	sr	c	Apr. 30	yes	sr	c	May 1			Sept. 5	yes
Rough-winged swallow	sr	fc	May 4, 10		yes	sr	oc			yes							sr	rare					yes
Bohemian waxwing																							
Cedar waxwing	sr	c	Mar. 28		yes	sr	c	Mar. 15		yes	sr	c	sr, res	c, oc	Feb. 4, Apr. 18	yes	sr, res	c, oc	Mar. 30				June 15, July
Northern shrike	wv	unc				wv	rare				wv		wv				wv	c		Apr. 1	Nov. 1		
Migrant shrike											sr	unc	sr	fc	Apr. 8		sr	rare	Apr 8				
Red-eyed vireo	sr	c	May 2, 12		yes	sr	c			yes	sr	c	sr	c	May 4, 12	yes	sr	ab	May 8			Sept.	June 10
Philadelphia vireo																							
Warbling vireo	sr		May 7		yes	sr	fc			yes	sr	fc	sr			yes	sr	c	May 3, 5				yes
Yellow-throated vireo	sr					sr	fc	May 10		yes	sr	unc	sr	unc		yes	sr	fc	May 8				yes
Blue-headed vireo	tv		May 4								sr	unc					tv	rare	May 8, 10				
Plumbeous vireo																							
White-eyed vireo						sr	fc			yes													
Black and white warbler	sr	c	Apr. 30, May 2		yes	sr	c	May 6		yes	sr	c	tv		May 4, 6		tv	fc	May 2, 8, 10	May 14			
Prothonotary warbler																							
Worm-eating warbler																							
Blue-winged warbler		rare	May 22			tv		May 6															
Golden-winged warbler		rare	May 22										tv	unc	May 8, 14								
Lawrence warbler																							
Brewster warbler																							
Nashville warbler	tv					tv, sr	fc			yes	tv	fc	tv	c	May 8		tv, sr	fc, rare	May 3, 5, 11				25 May '00
Orange-crowned warbler																							
Tennessee warbler													tv		May 15								
Southern parula warbler																							
Northern parula warbler	tv		May 10, 13			tv		May 21					tv		May 9		tv, sr	fc, rare	May 8				
Cape May warbler																	tv	rare					
Yellow warbler	sr	c	Apr. 29, May 3		yes	sr	c	May 2	Sept. 26	yes	sr	c	sr	c		yes	sr	ab	Apr. 28, May 1			Oct. 1	May 18, 30
Black-throated blue warbler	tv	fc	May 1, 3			tv, sr	c	May 10	Sept. 21	yes	sr	c	tv				tv, sr	c, fc	May 12, 15				June 1, 6
Myrtle warbler	tv	c	Apr. 24, 30			tv	c	May 6	Oct. 12, Nov. 3		sr	c	tv	c	May 8		tv	ab	Apr. 26, May 4	May 15	Oct. 5	Oct. 18	
Magnolia warbler	tv	fc	May 3, 12			tv	unc	May 15			sr	fc	tv	fc	May 8, 12		tv, sr	c, fc	May 10				May 27, June 10
Cerulean warbler																	tv	rare					
Chestnut-sided warbler	tv, sr	c, oc	May 4, 8		yes	tv, sr	unc, ab	May 15		yes	sr	c	tv, sr	c, fc	May 8	yes	sr	c	May 6, 8				May 25, June 10
Bay-breasted warbler	tv	fc	May 15, 17, June 6										tv		May 14, 16		tv	fc	May 11, 13				
Black-poll warbler	tv		May 18, 20			tv	c	May 21			tv	fc	tv		May 19		tv	fc	May 15, 17		Sept. 25	Oct.	
Blackburnian warbler	tv	c	May 1, 3			tv		May 6			sr	fc	tv	unc	May 11		tv	ab, irreg	Apr. 28, May 8	May 21, 22	Sept.		
Yellow-throated warbler																							
Black-throated green warbler											sr	c	tv	c	May 5		tv, sr	c, fc	May 1, 8				June 1, 8
Pine warbler													tv		May 22		sr	unc, local					
Palm warbler	tv		May																				
Yellow-poll warbler																							
Prairie warbler																							
Oven-bird	sr	c	May 2, 6		yes	sr	c			yes	sr	c	sr	c		yes	sr	ab	May 9, 10			Sept. 15, 20	2 broods
Water-thrush	tv		Apr. 27								sr	fc	tv	fc			sr	rare					
Grinnell water-thrush																							
Louisiana water-thrush																							27 June '01, 11 June '06
Kentucky warbler																	sr	rare					
Connecticut warbler																							June 3
Mourning warbler											sr	unc					sr	fc	May 9			Sept.	yes
Northern yellow-throat	sr	c	May 2, 6		yes	sr	c	May 6		yes	sr	c	sr	c	May 12	yes	sr	c	May 8, 10, 15				June 10, 25
Yellow-breasted chat	sr	c	May 7, 14		yes	sr	oc			yes			sr			yes	sr	rare					June 5, 12
Hooded warbler	sr	?			?												sr	fc	May 8, 12				
Wilson warbler	tv		May 20			tv					tv						tv	fc	May 10	May 20			yes
Canadian warbler	tv		May 14			tv		May 21			sr	fc	tv				sr, tv	fc, c	May 11, 20			Sept.	May 25
American redstart	sr	c	May 1, 5		yes	sr	ab	May 7		May 25	sr	c	sr		May 10		sr	c	May 1, 5, 11				
American pipit											tv												
Mockingbird																							
Catbird	sr	c	Apr. 26, 30		yes	sr	ab	May 3, 7		May 26	sr	fc	sr	c	May 8	yes	sr	ab	May 6, 8			Oct. 1	May 20, 30
Brown thrasher	sr	c	May 1, 3			sr	rare			yes	sr	local	sr				sr	fc					yes
Carolina wren																							
House wren	sr				yes	sr	fc	May 10	Oct. 5	yes			sr			yes	sr	fc	Apr. 30			Oct. 15	yes
Winter wren											sr	fc					tv	unc					
Short-billed marsh wren																	tv	rare					yes
Long-billed marsh wren																	sr	local				Oct.	
Brown creeper	tv		Apr. 2, 12			tv					sr	c	tv, sr	c, fc		yes	tv, wv	fc, oc	Apr.	May 8			May 8
White-breasted nuthatch	res	c			yes	res	c			yes	res	unc	res				res	ab		Apr. 21			
Red-breasted nuthatch	tv		Mar 2, May 5								sr	fc	tv				tv, wv	c, oc	Apr. 17				
Brown-headed nuthatch	av		24 May '88																				May 15
Tufted titmouse																							
Chickadee	res	c			yes	res	c			May 10	res	c	res			yes	res	ab					
Carolina chickadee																							
Hudsonian chickadee																							
Golden-crowned kinglet	tv	c	Apr 2, 12			tv	c		Oct. 19		tv	c	tv				tv	c	Apr.	Apr. 15		Oct.	
Ruby-crowned kinglet	tv	fc	Apr 22	Oct. 26		tv	fc	Apr. 29	Oct. 11, 19		tv	fc	tv	fc	Apr.		tv	fc	Apr.				
Blue-gray gnatcatcher																							
Townsend solitaire																						Oct. 1	yes
Wood thrush	sr	c			yes	sr	rare			yes			sr			yes	sr	c	Apr. 30			Sept. 1	yes
Wilson thrush	sr	c	Apr 26, May 4		yes	sr	ab				sr	c	sr	c		yes	sr	c	May 1, 8				
Gray-cheeked thrush											tv												
Bicknell thrush																							
Olive-backed thrush											tv, sr	c, fc											
Hermit thrush											sr	c	tv, sr	c, local			tv	fc	Mar 29, Apr 10			Nov. 1	2 broods
American robin	sr	ab	Mar. 7, 12		yes	sr	fc			yes	sr	c	sr	c	Mar. 18	yes	sr, res	ab, oc	Feb. 27, Mar. 10, 15				
Varied thrush						sr	ab	Mar. 8, 15		yes													
Wheatear																						Nov. 1	2 broods
Bluebird	sr	fc	Mar 8, 14		yes	sr	c	Mar. 20		Apr. 20, yes	sr	fc	sr	c	Mar. 15	yes	sr	c	Mar. 10, 20				

SPECIES RECORDED	DELAWARE							DUTCHESS			
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Bre
Rose-breasted grosbeak	sr.	ab.	May 13				yes	sr.	fc.	May 1, 7	yes
Blue grosbeak	av.					July '99					
Indigo bunting	sr.	ab.	May 6				yes	sr.	c.	May 8, 12	June 1, 2
Painted bunting											
Dickcissel											
Lark bunting											
Louisiana tanager											
Scarlet tanager	tv, sr.	c, fc.	May				yes	sr.	c.	May 8, 10	yes
Summer tanager											
Purple martin								sr.			
Cliff swallow	sr.	fc.					yes	sr.			
Barn swallow	sr.	c.	Apr. 28				yes	sr.			
Tree swallow	tv.							tv.			
Bank swallow								sr.	c.		yes
Rough-winged swallow											
Bohemian waxwing											
Cedar waxwing	sr.	c.	Mar. 30				yes	sr.	c.	Mar. 19	June 20,
Northern shrike	wv.	unc.						wv.			
Migrant shrike											
Red-eyed vireo	sr.	ab.	May 10				yes	sr.	c.	May 10, 12	May 20,
Philadelphia vireo											
Warbling vireo	sr.	fc.	May 8				yes	sr.	fc.	May 3	May 30,
Yellow-throated vireo	sr.	fc.	May 9					sr.	c.	May 1, 4	June 1, 2
Blue-headed vireo	tv.	fc.	May 16								
Plumbeous vireo											
White-eyed vireo	sr.	fc.					yes	sr.	fc.	May 3, 13	June 10,
Black and white warbler	tv.	c.	May 3					sr.	c.	Apr. 25, 30	yes
Prothonotary warbler											
Worm-eating warbler	sr.	oc.	May 9			Aug.					
Blue-winged warbler	sr.	oc.	May			Aug.					
Golden-winged warbler	sr.	unc.				July		sr.	fc.	May 13	yes
Lawrence warbler											
Brewster warbler											
Nashville warbler	sr.	fc.	May 8				yes	tv.			
Orange-crowned warbler											
Tennessee warbler											
Southern parula warbler											
Northern parula warbler	tv.	fc.	May 3	May 14				tv.	c.	May 1, 3	
Cape May warbler											
Yellow warbler	sr.	c.					yes	sr.	c.	May 2	yes
Black-throated blue warbler	sr.	c.	May 3					tv.	unc.	May 10	
Myrtle warbler	tv.	c.	May 3	May 14				tv.	c.	May 3	
Magnolia warbler	sr.	c.	May 9					tv.	c.	May 10, 14	
Cerulean warbler								sr.		4 July '95	
Chestnut-sided warbler	sr.	c.	May 9				yes	sr.	c.	May 9	May 27,
Bay-breasted warbler	tv.	fc.	May 9								
Black-poll warbler	tv.	fc.	May 19					tv.	unc.	May 27	
Blackburnian warbler	tv, sr.	c, oc.	May 3	May 20			July 2	tv.	unc.	May 16	
Yellow-throated warbler											
Black-throated green warbler								tv.	c.	May 8	
Pine warbler	sr.	unc.									
Palm warbler											
Yellow palm warbler											
Prairie warbler											
Ovenbird	sr.	ab.					yes	sr.	c.	May 6, 8	June 5, 2
Water-thrush								tv.	oc.		
Grinnell water-thrush											
Louisiana water-thrush	sr.	10 June '00						sr.	unc.		
Kentucky warbler											
Connecticut warbler											
Mourning warbler								tv.	oc.	29 May '93	
Northern yellow-throat	sr.	c.	May 11					sr.	c.	May 2, 6	yes
Yellow-breasted chat	sr.	unc.						sr.	c.	May 10, 12	June 6, S
Hooded warbler											
Wilson warbler	tv.	fc.	May 22					tv.	oc.		
Canadian warbler	sr.	c.						tv.	fc.	May 14	
American redstart	sr.	ab.	May 3				yes	sr.	c.	Apr. 30, May 2	May 20.
American pipit	tv.				Oct. 5						
Mockingbird											
Catbird	sr.	c.	May 18				yes	sr.	c.	May 3, 5	May 25,
Brown thrasher	sr.	fc.						sr.	fc.	Apr. 29, May 5	June 1, 2
Carolina wren								av.	5 May '91		
House wren	sr.	fc.					yes	sr.	c.	Apr. 15, 30	May 25,
Winter wren	sr.	rare					yes	wv.	oc.		
Short-billed marsh wren								sr.	rare	May 17	23 June '
Long-billed marsh wren											
Brown creeper	wv.	c.						tv.	c.	Apr. 12, 20	
White-breasted nuthatch	res.	c.						res.	c.		Apr. 15,
Red-breasted nuthatch	wv.	c.									
Brown-headed nuthatch											
Tufted titmouse											
Chickadee	res.	c.					yes	res.	ab.		May 10, 2
Carolina chickadee											
Hudsonian chickadee											
Golden-crowned kinglet								tv.	c.		
Ruby-crowned kinglet	tv.	c.		May	Oct.			tv.	c.	Apr. 15, 17	
Blue-gray gnatcatcher											
Townsend solitaire											
Wood thrush	sr.							sr.	c.	May 5, 7	May 22,
Wilson thrush	sr.	ab.	May 11				yes	sr.	ab.	May 1	May 22,
Gray-cheeked thrush											
Bicknell thrush											
Olive-backed thrush	tv.		May 17	June 1				tv.	fc.	May 12	
Hermit thrush	tv, sr.	fc, 1900	Apr. 21					tv.	fc.	Apr. 10	
American robin	sr.	ab.					yes	sr.	ab.	Mar. 10, 12	Apr. 20,
Varied thrush											
Wheatear											
Bluebird	sr.	ab.	Apr. 6				yes	sr.	c.	Feb. 16, 24	Apr. 16,

	ERIE						ESSEX				
nt	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Departs for south	Breeds
	fc	May 5, 8			Sept	May 15, 30	sr	unc			yes
	c	May 5, 8			Sept	May 20, June 10	sr	rare	May 15		yes
	c	May 8, 10			Sept	May 25, June 15	sr	unc	May 17		yes
	fc, local	Apr. 20			Aug. 25	yes	sr	local			yes
	c	Apr. 20, 30			Sept. 1, 10	May 15, July 10	sr	c	Apr. 26	Sept. 4, 16	yes
	ab	Apr. 12, 16			Sept. 5, 12	May 5, June 30	sr	c	Apr. 21, 24	Sept. 4, 17, 23	yes
	fc, c	Apr. 7, 10			Sept	yes	sr	c	Apr. 14	Sept. 4, 23	yes
	c	Apr. 16, 25			Aug. 20, Sept. 5	May 20, June 20	sr	fc	Apr. 21, 25	Sept. 4	yes
	fc	Apr. 25			Aug	May 25	sr	rare, 1905			
	rare, 1886										
	ab, oc	Mar. 10, 15				June 5, July 10	sr	c			yes
	unc		Mar.	Nov			wv				
	fc, rare	Mar. 25, Apr. 5			Oct	May 1, 25	sr	rare			yes, 188c
	ab	May 10, 12			Sept. 1	May 20, June 20	sr	ab	May 14	Sept. 29, Oct. 5	yes
	rare						tv	rare	22 May '84		
	c	May 2, 8			Aug	May 20, June 10	sr	local			yes
	fc	May 2, 5				May 25	sr	rare	May 8		
	fc	May 5			Sept		sr	fc	Apr. 26	Sept. 26, Oct. 15	yes
	rare					yes					
	c, rare	Apr. 21, 30	June 6		Sept	yes	sr	c	May 6	Sept. 19	yes
	rare										
	rare	12 May '88	May 22								
	c, rare	Apr. 26, May 6	May 15			yes	sr	rare	May 9, 11, 18		yes
	unc	15 May '04	17 May '05								
	rare						sr	rare	30 May '82		
	fc, rare	May 10			Sept. 25		sr	fc	May 8	Sept. 16, 20	yes
	rare	10, 12 May '06					tv	rare			
	ab	Apr. 29, May 2				May 15, June 10	sr	c	May 6, 10	Sept. 1	yes
	c, rare	May 8, 10			Sept	June 1	sr	ab	Apr. 30, May 8, 12	Sept. 13	yes
	ab	Apr. 21, 26	May 15	Sept	Oct. 20		sr	ab	Apr. 26, May 1	Oct. 24	yes
	c, fc	May 5, 10			Sept	June 15, 26	sr	ab	May 10, 13		yes
	c, local	May 5, 12				May 20, June 15					
	c	May 5, 10			Sept	May 20, June 30	sr	c	May 3, 9, 13	Sept. 11	yes
	fc	May 5, 10		Aug. 20, Sept. 1	Sept. 10		tv		May 13		
	fc	May 12, 22	May 30	Sept			sr	c, local	May 12	Oct. 12	yes
	c, local	May 5, 8			Sept. 15	June 10	sr	c	May 12	Sept. 14	yes
	ab, fc	May 4, 6			Sept. 25	June 1	sr	ab	May 11	Oct. 9	yes
	oc	Apr. 26					sr	unc	Apr. 23	Sept. 16, 25	
	fc	Apr. 15, 25	May 14				tv			Sept. 23	
	ab	Apr. 28, May 2, 5			Sept. 10	May 20, June 15	sr	ab	May 7, 12, 14	Sept. 16, 22	yes
	fc, rare	May 12, 18				June 10, yes	sr	c	May 4, 9	Sept. 21	yes
	unc					yes ?					
	unc	May 9, 10			Aug. 20	June 10, 29	sr	fc			yes
	c	Apr.30, May 5, 10			Sept	May 30, June 20	sr	c	May 4, 10, 17	Sept. 11, 22	yes
	rare					June 17					
	fc	May 10, 12, 19				May 25, June 5, 15					
	unc	May 12	May 25				tv			Sept. 20	
	c, unc	May 8, 12	May 19		Sept	June 5, 7	sr	c		Sept. 5	yes
	c	May 5, 10			Sept. 1, 15	May 22, June 15	sr	fc	May 11, 12	Sept. 7, 13	yes
	fc	May 5, 12		Oct. 1	Nov. 5		tv	fc		Sept. 28, Oct. 22	
	ab	May 3, 8			Oct. 5	May 18, June 30	sr	fc	May 3, 4		yes
	fc	Apr. 30, May 2			Oct	May 20, June 10	sr	oc	May 7		yes
	5 Nov. '94										
	fc	May 3, 7			Sept	May 20, July 5	sr	rare	May 6		yes
	fc, rare	Apr. 9	May 10	Oct. 5	Nov	yes	sr	ab	Apr. 12		yes
	rare					yes, twice					
	c	May 10				yes	sr				
	ab, rare					yes	sr	c			yes
	c					Apr. 20, May 10	sr	unc			yes
	fc, oc					June 26, 30	res, sr	fc, ab			yes
	ab					Apr. 20, May 15	res	ab			yes
							res	unc			yes
	c, oc	Apr. 1, 7	May 10, 15	Oct			sr	c	Apr. 4	Oct. 26, Nov	yes
	c	Apr. 20	May 15	Sept. 25	Oct. 20		tv, sr	c, rare	Apr. 20	Oct. 24	
	c	May 1, 7			Sept	May 20, June 25	sr	fc	May 12, 14, 16	Sept. 10	yes
	c	Apr. 28, May 5			Sept	May 20, June 10	sr	c	May 14		yes
	fc	May 14									
							sr	fc, local			yes
	c	May 10, 13					sr	c			yes
	c, rare	Apr. 5, 17	May 12	Sept	Oct. 20	June 10	sr	c	Apr. 13, 18, 22	Oct. 15	yes
	ab, rare	Feb. 20, Mar. 15			Nov	Apr. 15, July 1	sr, tv	c, ab	Feb. 5, Mar. 21	Oct. 23, 26	yes
	c	Feb. 20, Mar. 10			Nov	Apr. 15, July 10	sr	c	Mar. 18, 21, Apr. 4	Oct. 20, 26	yes

SPECIES RECORDED	DELAWARE							DUTCHESS				ERIE							ESSEX				
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Departs for south	Breeds
Rose-breasted grosbeak	sr	ab.	May 13				yes	sr.	fc.	May 1, 7	yes	sr.	fc.	May 5, 8			Sept.	May 15, 30	sr.	unc.			yes
Blue grosbeak	av.					July '99																	
Indigo bunting	sr.	ab.	May 6				yes	sr.	c.	May 8, 12	June 1, 20	sr.	c.	May 5, 8			Sept.	May 20, June 10	sr.	rare	May 15		yes
Painted bunting																							
Dickcissel																							
Lark bunting																							
Louisiana tanager																							
Scarlet tanager	tv, sr.	c, fc.	May				yes	sr.	c.	May 8, 10	yes	sr.	c.	May 8, 10			Sept.	May 25, June 15	sr.	unc.	May 17		yes
Summer tanager																							
Purple martin								sr.				sr.	fc, local	Apr 20			Aug. 25	yes	sr.	local			yes
Cliff swallow	sr.	fc.					yes	sr.				sr.	c	Apr. 20, 30			Sept. 1, 10	May 13, July 30	sr.	c.	Apr. 26	Sept. 4, 16	yes
Barn swallow	sr	c.	Apr. 28.				yes	sr				sr.	ab.	Apr. 12, 16			Sept. 5, 12	May 5, June 30	sr.	c.	Apr. 21, 24	Sept. 4, 17, 23	yes
Tree swallow	tv							tv.				sr, tv.	fc, c	Apr. 7, 10			Sept.	yes	sr.	c.	Apr. 14	Sept. 4, 23	yes
Bank swallow								sr	c.		yes	sr	c.	Apr. 16, 25			Aug. 20, Sept. 5	May 20, June 20	sr.	fc.	Apr. 21, 25	Sept. 4	yes
Rough-winged swallow												sr.	fc	Apr. 25			Aug.	May 25	sr.	rare, 1905			
Bohemian waxwing												wv.	rare, 1886										
Cedar waxwing	sr.	c.	Mar. 30				yes	sr.	c.	Mar. 19	June 20, Aug. 10	sr, res.	ab, oc.	Mar. 10, 15				June 5, July 10	sr.	c.			yes
Northern shrike	wv	unc.						wv				wv	unc.		Mar.	Nov.			wv.				
Migrant shrike												sr, res.	fc, rare	Mar. 25, Apr. 5			Oct.	May 1, 25	sr.	rare			yes, 1880
Red-eyed vireo	sr.	ab.	May 10				yes	sr.	c.	May 10, 12	May 20, June 10	sr.	ab.	May 10, 12			Sept. 1	May 20, June 20	sr.	ab.	May 14	Sept. 20, Oct. 5	yes
Philadelphia vireo												tv.	rare						tv.	rare	22 May '84		
Warbling vireo	sr.	fc.	May 8				yes	sr.	fc.	May 3	May 30, June 12	sr.	c.	May 2, 8			Aug.	May 20, June 10	sr.	local			yes
Yellow-throated vireo	sr.	fc	May 9					sr.	c.	May 1, 4	June 1, 25	sr.	fc.	May 2, 5				May 25	sr.	rare	May 8		
Blue-headed vireo	tv	fc	May 16									tv	fc.	May 5			Sept.		sr.	fc.	Apr. 26	Sept 26, Oct 15	yes
Plumbeous vireo																							
White-eyed vireo	sr.	fc.					yes	sr.	fc.	May 3, 13	June 10, July 15	sr.	rare					yes					
Black and white warbler	tv	c.	May 3					sr.	c.	Apr. 25, 30	yes	tv, sr.	c, rare	Apr. 21, 30	June 6		Sept.	yes	sr.	c.	May 6	Sept. 19	yes
Prothonotary warbler												av.											
Worm-eating warbler	sr.	oc.	May 9			Aug.																	
Blue-winged warbler	sr	oc.	May			Aug.							rare										
Golden-winged warbler	sr	unc.				July		sr.	fc.	May 13	yes	tv	rare	12 May '88	May 22								
Lawrence warbler																							
Brewster warbler																							
Nashville warbler	sr.	fc.	May 8				yes	tv.				tv, sr	c, rare	Apr 20, May 6	May 15								
Orange-crowned warbler												tv	unc.	15 May '04	17 May '05			yes	sr.	rare	May 9, 11, 18		yes
Tennessee warbler												tv	rare										
Northern parula warbler																					30 May '82		
Cape May warbler	tv	fc.	May 3	May 14				tv	c.	May 1, 3		tv, sr	fc, rare	May 10			Sept. 25		sr.	fc	May 8	Sept. 10, 20	yes
Yellow warbler												tv	rare	10, 12 May '06					tv	rare			
Black-throated blue warbler	sr.	c.	May 3				yes	sr.	c.	May 2	yes	sr.	ab.	Apr. 29, May 2				May 15, June 10	sr.	c.	May 6, 10	Sept. 1	yes
Myrtle warbler	tv	c.	May 3					tv	unc.	May 10		tv, sr.	c, rare	May 8, 10			Sept.	June 1	sr.	ab.	Apr 30, May 8, 12	Sept 11	yes
Magnolia warbler	sr.	c.	May 9	May 14				tv.	c.	May 3		tv.	ab.	Apr 21, 26	May 15	Sept.	Oct. 20		sr.	ab.	Apr. 20, May 1	Oct. 24	yes
Cerulean warbler								tv.	c.	May 10, 14		tv, sr.	c, fc	May 5, 10			Sept.	June 15, 26	sr.	ab.	May 10, 11		yes
Chestnut-sided warbler	sr.	c.	May 9					sr.		4 July '95		sr.	c, local	May 5, 12				May 20, June 15					
Bay-breasted warbler	tv.	fc.	May 9				yes	sr.	c.	May 9	May 27, June 10	sr.	c.	May 5, 12			Sept.	May 20, June 30	sr.	c.	May 3, 9, 13	Sept. 11	yes
Black-poll warbler	tv	fc	May 19									tv.	fc.	May 5, 10			Sept. 10		tv.		May 11		
Blackburnian warbler	tv, sr.	c, oc.	May 3	May 20			July 2	tv.	unc.	May 27		tv	fc.	May 12, 22	May 30	Sept.			sr.	c, local	May 12	Oct 12	yes
Yellow-throated warbler								tv.	unc.	May 16		tv, sr.	c, local	May 5, 8			Sept. 15	June 10	sr.	c.	May 12	Sept. 14	yes
Black-throated green warbler																							
Pine warbler	sr.	unc.						tv.	c.	May 8		tv, sr.	ab, fc	May 4, 6			Sept. 25	June 1	sr.	ab	May 11	Oct 9	yes
Palm warbler												tv.	oc.	Apr. 26					sr.	unc.	Apr. 23	Sept 10, 25	
Yellow palm warbler												tv.	fc.	Apr. 15, 25	May 14				tv.			Sept 23	
Prairie warbler																							
Ovenbird	sr.	ab.					yes	sr.	c.	May 6, 8	June 5, 25	sr.	ab.	Apr. 28, May 2, 5			Sept. 10	May 20, June 15	sr.	ab.	May 7, 12, 14	Sept. 16, 22	yes
Water-thrush								tv.	oc.			tv, sr.	fc, rare	May 12, 18				June 10, yes	sr.	c.	May 4, 9	Sept 21	yes
Grinnell water-thrush																							
Louisiana water-thrush	sr.	to June '00						sr.	unc.			sr.	unc.					yes ?					
Kentucky warbler																							
Connecticut warbler																							yes
Mourning warbler								tv.	oc.	29 May '03		sr.	unc.	May 9, 10			Aug. 20	June 10, 29	sr.	fc.			
Northern yellow-throat	sr.	c.	May 11					sr.	c.	May 2, 6	yes	sr.	c.	Apr. 30, May 5, 10			Sept.	May 30, June 20	sr.	c.	May 4, 10, 17	Sept. 11, 22	yes
Yellow-breasted chat	sr.	unc.						sr.	c.	May 10, 12	June 6, 8, 25	sr.	rare					June 17					
Hooded warbler												sr.	fc	May 10, 12, 19				May 25, June 5, 15					
Wilson warbler	tv	fc.	May 22					tv.	oc.			tv.	unc	May 12	May 25				tv.			Sept 29	
Canadian warbler	sr	c.						tv.	fc.	May 14		tv, sr.	c, unc.	May 8, 12	May 19		Sept.	June 5, 7	sr.	c.		Sept 5	yes
American redstart	sr.	ab.	May 3				yes	sr.	c.	Apr. 30, May 2	May 20	sr.	c	May 5, 10			Sept 1, 15	May 22, June 15	sr.	fc.	May 11, 12	Sept 7, 13	yes
American pipit	tv				Oct. 5							tv.	fc	May 5, 12			Nov. 5		tv.	fc.		Sept 28, Oct 22	
Mockingbird												av.											
Catbird	sr	c.	May 18				yes	sr.	c.	May 3, 5	May 25, June 10	sr	ab.	May 3, 8			Oct 5	May 28, June 30	sr.	fc.	May 3, 4		yes
Brown thrasher	sr.	fc						sr.	fc.	Apr. 29, May 5	June 1, 20	sr	fc.	Apr. 30, May 2			Oct.	May 20, June 10	sr.	oc.	May 7		
Carolina wren												av.		5 Nov '94									
House wren	sr.	fc					yes	av.		5 May '91	May 25, July 6	sr.	fc.	May 3, 7			Sept.	May 20, July 5	sr.	rare	May 6		yes
Winter wren	sr	rare					yes	sr.	c.	Apr. 15, 30		tv, sr.	fc, rare	Apr. 9	May 10	Oct. 5	Nov.	yes	sr.	ab.	Apr. 12		yes
Short-billed marsh wren								wv.	oc.		23 June '97	sr.	rare					yes, twice					
Long-billed marsh wren								sr.	rare	May 17		sr.	c.	May 10				yes	sr.				yes
Brown creeper	wv	c										tv, res.	ab, rare					yes	sr.	c.			yes
White-breasted nuthatch	res.	c						tv	c.	Apr. 12, 20		res.	c					Apr. 20, May 10	sr.	unc.			yes
Red-breasted nuthatch	av	c						res.	c		Apr. 15, May 25	tv, res	fc, oc					June 26, 30	res, sr.	fc, ab			yes
Brown-headed nuthatch																							
Tufted titmouse																							
Chickadee	res	c										res.	ab.					Apr. 20, May 15	res	ab.			yes
Carolina chickadee							yes	res	ab.		May 10, 25												
Hudsonian chickadee																			res.	unc			yes
Golden-crowned kinglet												tv, wv	c, oc	Apr. 1, 7	May 10, 15	Oct.			r		Apr 4	Oct 26, Nov	
Ruby-crowned kinglet	tv	c.		May	Oct.			tv	c.			tv.		Apr. 20	May 15	Sept. 25	Oct. 20		tv, sr	c, rare	Apr. 20	Oct 24	yes
Blue-gray gnatcatcher								tv	c.	Apr 15, 17		av											
Townsend solitaire																							
Wood thrush	sr										May 22, June 10	sr	c.	May 1, 7			Sept	May 20, June 25	sr.	fc.	May 12, 14, 16	Sept 10	yes
Wilson thrush	sr.	ab.	May 11					sr.	c.	May 5, 7	May 22, June 25	sr	c.	Apr. 28, May 5			Sept.	May 20, June 10	sr.	c	May 14		yes
Gray-cheeked thrush							yes	sr.	ab.	May 1		tv.	fc.	May 14					sr.	fc, local			yes
Bicknell thrush																							yes
Olive-backed thrush	tv		May 17	June 1								tv	c	May 10, 13					sr.	c	Apr 11, 18, 22	Oct 15	yes
Hermit thrush	tv, sr	fc 1900	Apr. 21					tv.	fc.	May 12		tv, sr	c, rare	Apr. 5, 17	May 12	Sept.	Oct 20	June 10	sr	c, ab.	Feb 5, Mar 21	Oct 23, 26	yes
American robin	sr	ab						tv.	fc.	Apr. 10		sr, res	ab, rare	Feb. 20, Mar. 15			Nov.	Apr. 15, July 1	sr, tv				
Varied thrush							yes	sr.	ab.	Mar. 10, 12	Apr. 20, July 11												
Wheatear																							
Bluebird	sr.	ab.	Apr 6				yes	sr.	c.	Feb. 16, 24	Apr 16, July 11	sr.	c	Feb. 20, Mar. 10			Nov.	Apr. 15, July 10	sr.	c.	Mar 18, 21, Apr 4	Oct 20, 26	yes

SPECIES RECORDED	FRANKLIN						FULTON				
	Resident or transient	Common or rare	Arrives from south	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	
Rose-breasted grosbeak	sr	fc	May 17		Sept. 9	yes	sr	c	May 21		ye
Blue grosbeak											
Indigo bunting	sr	local			Oct. 3		sr	c	May 18		ye
Painted bunting											
Dickcissel											
Lark bunting											
Louisiana tanager											
Scarlet tanager	sr	fc	May 21		Sept. 4	yes	sr	unc	May 19		
Summer tanager											
Purple martin	sr	local	Apr. 16			yes	sr	rare			
Cliff swallow	sr	c				yes	sr	c	Apr. 29		ye
Barn swallow	sr	c				yes	sr	c			ye
Tree swallow	sr	c				yes	sr	c	Apr. 15		ye
Bank swallow	sr	fc				yes	sr	c	May 6		ye
Rough-winged swallow							sr	fc			ye
Bohemian waxwing											
Cedar waxwing	sr	c			Sept. 15	yes	sr	c	Mar. 12, 26		ye
Northern shrike							wv	o			
Migrant shrike	sr	unc					sr	unc	Apr. 3		ye
Red-eyed vireo	sr	c	May 21		Sept. 11	yes	sr	c	May 10		ye
Philadelphia vireo	tv			Aug. 25, Sep. 8	Sept. 14, 16						
Warbling vireo							sr	c	May 1, 11		ye
Yellow-throated vireo	sr	rare			Aug. 24						
Blue-headed vireo	sr	fc	May 5		Sept. 18	yes		rare	May 5		
Plumbeous vireo											
White-eyed vireo											
Black and white warbler	sr	fc	May 12			yes	sr	c	Apr. 30		ye
Prothonotary warbler											
Worm-eating warbler											
Blue-winged warbler							tv	rare	May 6		
Golden-winged warbler											
Lawrence warbler											
Brewster warbler											
Nashville warbler	sr	c	May 12		Sept. 14	yes	sr	fc	Apr. 30		ye
Orange-crowned warbler	tv	rare	17 May '08								
Tennessee warbler											
Southern parula warbler											
Northern parula warbler	tv, sr	ab, Sept., fc	May 16			yes	sr	c	May 11		ye
Cape May warbler	tv	rare	May 17								
Yellow warbler	sr	fc				yes	sr	c	Apr. 30, May 2		ye
Black-throated blue warbler	sr	ab	May 12		Sept. 18	yes	tv, sr	c, local	May 4		ye
Myrtle warbler	sr	ab	Apr. 25			yes	tv	c	Apr. 30		
Magnolia warbler	sr	ab	May 16		Sept	yes	tv, sr	c, local	May 4		ye
Cerulean warbler											
Chestnut-sided warbler	sr	c	May 16		Sept. 9	yes	sr	c	May 5		ye
Bay-breasted warbler	tv	c irreg.	May 19	Aug. 25	Sept. 14		tv	rare	May 22		
Black-poll warbler	sr, tv				Sept		tv	c	May 19		
Blackburnian warbler	sr	c	May 16		Sept. 13	yes	tv, sr	fc, local			
Yellow-throated warbler											
Black-throated green warbler	sr	ab	May 12		Sept	yes	tv, sr	c, fc			ye
Pine warbler	sr		16 May '05								
Palm warbler							tv	rare	May 5		
Yellow palm warbler											
Prairie warbler		rare	17 May '08								
Ovenbird	sr	c	May 12		Sept. 11	yes	sr	c	May 5		ye
Water-thrush	sr	c	May 12		Sept. 14	yes					
Grinnell water-thrush											
Louisiana water-thrush											
Kentucky warbler											
Connecticut warbler	tv				8 Sept. '97						
Mourning warbler	sr, tv	fc; ab, 1897	May 25			yes	tv, sr	unc; c, local			
Northern yellow-throat	sr	c	May 14		Sept	yes	sr	c	May 6		ye
Yellow-breasted chat											
Hooded warbler											
Wilson warbler	tv	13 Sept. '97									
Canadian warbler	sr	c	May 16		Sept	yes	tv, sr	c; c, local	May 20	May 22	
American redstart	sr	c	May 17		Sept. 14	yes	sr	ab	May 4		ye
American pipit	tv	fc		Sept. 13, 20	Sept. 23						
Mockingbird							av	4 May '05			
Catbird	sr	c			Sept		sr	c	May 6		ye
Brown thrasher	sr	fc	May 6			yes	sr	c	Apr. 30		ye
Carolina wren											
House wren		unc			5 Sept. '99		sr	oc			
Winter wren	sr, tv	c, ab	Apr. 17			yes	tv, res	fc, oc			
Short-billed marsh wren											
Long-billed marsh wren					Sept		sr	c	May 10		ye
Brown creeper	sr, res	c, oc	Apr. 17			yes	tv, wv	fc, oc	Apr. 2	May 7	
White-breasted nuthatch	res	fc					res	c			ye
Red-breasted nuthatch	res, sr	fc, ab	Apr. 13			yes	wv, res	unc, oc	Apr. 5		ye
Brown-headed nuthatch											
Tufted titmouse											
Chickadee	res	ab				yes	res	ab			ye
Carolina chickadee											
Hudsonian chickadee	res	fc				yes					
Golden-crowned kinglet	sr, tv	fc, ab	Apr. 14			yes	tv	c	Apr. 2	Apr. 30	
Ruby-crowned kinglet	tv	c	Apr. 23		Sept. 15		tv	c	Apr. 9	May 9	
Blue-gray gnatcatcher											
Townsend solitaire											
Wood thrush	sr	fc			Sept. 4		sr	c	May 12		ye
Wilson thrush	sr	fc	May 30			yes	sr	c	Apr. 26, May 3		ye
Gray-cheeked thrush	tv		May 16								
Bicknell thrush											
Olive-backed thrush	sr	c	May 22			yes	tv, sr	c, local	May 30		ye
Hermit thrush	sr	c	Apr. 26		Sept	yes	tv, sr	c, local	Apr. 3		ye
American robin	sr, tv	c, ab	Apr. 4			yes	sr	ab	Mar. 18		ye
Varied thrush											
Wheatear											
Bluebird	sr	fc				yes	sr	c	Mar. 7		ye

GENESEE						GREENE			HAMILTON			
dent r sient	Common or rare	Arrives from south	Leaves for north	Returns from north	Breeds	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Departs for south	Breeds
	unc.				yes	sr		yes	sr	unc		yes
	c	May 7, 10			yes	sr		yes	sr	unc, local, May 31		
	unc	May 18				sr		yes	sr	unc		yes
	c	Apr. 8, 16			yes	sr		yes				
	fc				yes	sr		yes	sr	fc		yes
	c	Apr. 6, 14			yes	sr		yes	sr	c		yes
	c	Apr. 1			yes				sr	c		yes
	c				yes	sr	c	yes	sr	local		yes
						sr	unc		sr	rare	Aug. '06	
	c, oc				yes	res		yes	sr	c		yes
	oc					wv	oc		wv			
	fc				yes				sr	unc		yes
	c				yes	sr	c	yes	sr	c		yes
						tv	unc					
	c	May 5, 7			yes	sr		yes	sr	rare		
						sr		yes	sr	unc		
	unc					sr		yes	sr	fc		
						sr		yes				
	c, unc	Apr. 25, 28			yes	sr		yes	sr	unc		yes
						sr		yes				
	fc	May 5	May 25	Aug. 24		sr, tv	local, c	yes	tv		Oct. 19	
	c	May 9							sr			
	rare	May 11							tv	rare	Sept. '06	
	c	May 1			yes	sr	c	yes	sr	unc		
	c	May 3, 5				tv			sr	fc		June 13
	fc					tv			sr	c		yes
	fc					tv	c		sr	c		yes
	unc	May 20	June 20									
	unc	May 7			yes	sr		yes	sr	fc		yes
	c	May 20	May 29	Sept. 1		tv			tv			
	c	May 20	June 3	Sept. 1		tv			tv	unc		
	c	May 2	May 29			tv			sr	c		yes
	c					tv			sr	c		yes
				Sept. 22								
									tv	rare	13 Oct. '79	
	c	May 8			yes	sr	c	yes	sr	c		yes
						sr			sr	unc		yes
						sr	July 3					
	unc											
									sr	unc		yes
	c				yes	sr	c	yes	sr	fc		yes
						sr		yes				
									tv	rare		
	fc	May 17			June 16	sr			sr	c		June 6
	c	May 14, 17			yes	sr	c	yes	sr	c		yes
									tv			
	c	May 6			yes	sr	c	yes	sr	unc		yes
	c	May 3, 5			yes	sr		yes	sr	local		
	c	May 4, 5			yes	sr		yes				
	local				June 16				sr	c		yes
	c				yes							
	c	Apr. 9, 11				wv			sr	fc		yes
	c				yes	res	c	yes	sr	rare		
	c					res	irreg		res	ab		yes
	ab				yes	res	ab	yes	res	ab		yes
									rcs	unc		yes
	c	Apr. 10		Oct. 1		wv			sr, tv	fc, c		yes
	c	Apr. 20	May 10			tv			tv	c		
	c	May 5, 7			yes	sr		yes	sr	local		
	c	May 7			yes	sr	c	yes	sr	unc		
									tv			
						sr	local	June				
									sr	fc		yes
	c					tv			sr	ab		yes
	ab, oc	Feb. 25, Mar. 3			yes	sr	ab	yes	sr	c		yes
	c	Mar. 2, 6			yes	sr	c	yes	sr	unc		yes

SPECIES RECORDED	FRANKLIN						FULTON				
	Resident or transient	Common or rare	Arrives from south	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Breeds
Rose-breasted grosbeak	sr	fc	May 17		Sept. 9	yes	sr	c	May 21		yes
Blue grosbeak											
Indigo bunting	sr	local			Oct. 3		sr	c	May 18		yes
Painted bunting											
Dickcissel											
Lark bunting											
Louisiana tanager											
Scarlet tanager	sr	fc	May 21		Sept. 4	yes	sr	unc	May 19		
Summer tanager											
Purple martin	sr	local	Apr. 16			yes	sr	rare			
Cliff swallow	sr	c				yes	sr	c	Apr. 29		yes
Barn swallow	sr	c				yes	sr	c			yes
Tree swallow	sr	c				yes	sr	c	Apr. 15		yes
Bank swallow	sr	fc				yes	sr	c	May 6		yes
Rough-winged swallow							sr	fc			yes
Bohemian waxwing											
Cedar waxwing	sr	c			Sept. 15	yes	sr	c	Mar. 1 , 26		yes
Northern shrike							wv	o			
Migrant shrike	sr	unc					sr	unc	Apr. 3		yes
Red-eyed vireo	sr	c	May 21		Sept 11	yes	sr	c	May 10		yes
Philadelphia vireo	tv			Aug. 25, Sep. 8	Sept. 14, 16						
Warbling vireo							sr	c	May 1, 11		yes
Yellow-throated vireo	sr	rare			Aug 24						
Blue-headed vireo	sr	fc	May 5		Sept. 18	yes		rare	May 5		
Plumbeous vireo											
White-eyed vireo											
Black and white warbler	sr	fc	May 12			yes	sr	c	Apr. 30		yes
Prothonotary warbler											
Worm-eating warbler											
Blue-winged warbler							tv	rare	May 6		
Golden-winged warbler											
Lawrence warbler											
Brewster warbler											
Nashville warbler	sr	c	May 12		Sept. 14	yes	sr	fc	Apr. 30		yes
Orange-crowned warbler	tv	rare	17 May '08								
Tennessee warbler											
Southern parula warbler											
Northern parula warbler	tv, sr	ab, Sept , fc	May 16			yes	sr	c	May 11		yes
Cape May warbler	tv	rare	May 17								
Yellow warbler	sr	fc				yes	sr	c	Apr. 30, May 2		yes
Black-throated blue warbler	sr	ab	May 12		Sept. 18	yes	tv, sr	c, local	May 4		yes
Myrtle warbler	sr	ab	Apr 25			yes	tv	c	Apr. 30		
Magnolia warbler	sr	ab	May 16		Sept	yes	tv, sr	c, local	May 4		yes
Cerulean warbler											
Chestnut-sided warbler	sr	c	May 16		Sept. 9	yes	sr	c	May 5		yes
Bay-breasted warbler	tv	c irreg	May 19	Aug. 25	Sept. 14		tv	rare	May 22		
Black-poll warbler	sr, tv				Sept		tv	c	May 19		
Blackburnian warbler	sr	c	May 16		Sept. 13	yes	tv, sr	fc, local			
Yellow-throated warbler											
Black-throated green warbler	sr	ab	May 12		Sept	yes	tv, sr	c, fc			yes
Pine warbler	sr		16 May '05								
Palm warbler							tv	rare	May 5		
Yellow palm warbler											
Prairie warbler		rare	17 May '08								
Ovenbird	sr	c	May 12		Sept. 11	yes	sr	c	May 5		yes
Water-thrush	sr	c	May 12		Sept. 14	yes					
Grinnell water thrush											
Louisiana water thrush											
Kentucky warbler											
Connecticut warbler	tv				8 Sept. '97						
Mourning warbler	sr, tv	fc; ab, 1897	May 25			yes	tv, sr	unc; c, local			
Northern yellow-throat	sr	c	May 14		Sept	yes	sr	c	May 6		yes
Yellow breasted chat											
Hooded warbler											
Wilson warbler	tv	13 Sept. '97									
Canadian warbler	sr	c	May 16		Sept	yes	tv, sr	c; c, local	May 20	May 22	
American redstart	sr	c	May 17		Sept 14	yes	sr	ab	May 4		yes
American pipit	tv	fc		Sept. 13, 20	Sept 23						
Mockingbird							av	4 May '05			
Catbird	sr	c			Sept		sr	c	May 6		yes
Brown thrasher	sr	fc	May 6			yes	sr	c	Apr. 30		yes
Carolina wren											
House wren		unc			5 Sept. '90		sr	oc			
Winter wren	sr, tv	c, ab	Apr. 17			yes	tv, res	fc, oc			
Short-billed marsh wren											
Long-billed marsh wren					Sept		sr	c	May 10		yes
Brown creeper	sr, res	c, oc	Apr. 17			yes	tv, wv	fc, oc	Apr. 2	May 7	
White-breasted nuthatch	res	fc					res	c			yes
Red-breasted nuthatch	res, sr	fc, ab	Apr. 13			yes	wv, res	unc, oc	Apr. 5		yes
Brown-headed nuthatch											
Tufted titmouse											
Chickadee	res	ab					res	ab			yes
Carolina chickadee						yes					
Hudsonian chickadee	res	fc									
Golden-crowned kinglet	sr, tv	fc, ab	Apr. 14			yes					
Ruby-crowned kinglet	tv	c	Apr. 23			yes	tv	c	Apr. 2	Apr. 30	
Blue gray gnatcatcher					Sept. 15		tv	c	Apr. 9	May 9	
Townsend solitaire											
Wood thrush	sr	fc									
Wilson thrush	sr	fc	May 30		Sept. 4		sr	c	May 12		yes
Gray-cheeked thrush	tv		May 16			yes	sr	c	Apr. 26, May 3		yes
Bicknell thrush											
Olive backed thrush	sr	c	May 22								
Hermit thrush	sr	c	Apr. 26		Sept	yes	tv, sr	c, local	May 30		yes
American robin	sr, tv	c, ab	Apr. 4			yes	tv, sr	c, local	Apr. 1		yes
Varied thrush						yes	sr	ab	Mar. 18		yes
Wheatear											
Bluebird	sr	fc				yes	sr	c	Mar. 7		yes

SPECIES RECORDED	GENESEE						GREENE			HAMILTON			
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Breeds	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Departs for south	Breeds
Rose-breasted grosbeak	sr	unc.				yes	sr		yes	sr	unc		yes
Blue grosbeak													
Indigo bunting	sr	c	May 7, 1			yes	sr		yes	sr	unc, local, May 31		
Painted bunting													
Dickcissel													
Lark bunting													
Louisiana tanager													
Scarlet tanager	sr	unc	May 18				sr		yes	sr	unc		yes
Summer tanager													
Purple martin	sr	c	Apr. 8, 16			yes	sr		yes				
Cliff swallow	sr	fc				yes	sr		yes	sr	fc		yes
Barn swallow	sr	c	Apr. 6, 14			yes	sr		yes	sr	c		yes
Tree swallow	sr	c	Apr. 1			yes				sr	c		yes
Bank swallow	sr	c				yes	sr	c	yes	sr	local		yes
Rough-winged swallow							sr	unc		sr	rare	Aug. '06	
Bohemian waxwing													
Cedar waxwing						yes	res		yes	sr	c		yes
Northern shrike	wv	oc					wv	oc		wv			
Migrant shrike	sr	fc				yes				sr	unc		yes
Red-eyed vireo	sr	c				yes	sr	c	yes	sr	c		yes
Philadelphia vireo							tv	unc					
Warbling vireo	sr	c	May 5, 7			yes	sr		yes	sr	rare		
Yellow-throated vireo							sr		yes	sr	unc		
Blue-headed vireo	tv	unc					sr		yes	sr	fc		
Plumbeous vireo													
White-eyed vireo							sr		yes				
Black and white warbler	tv, sr	c, unc	Apr. 25, 28			yes	sr		yes	sr	unc		yes
Prothonotary warbler													
Worm-eating warbler							sr		yes				
Blue-winged warbler													
Golden-winged warbler													
Lawrence warbler													
Brewster warbler													
Nashville warbler	tv	fc	May 5	May 25	Aug. 24		sr, tv	local, c	yes	tv		Oct. 19	
Orange-crowned warbler													
Tennessee warbler													
Southern parula warbler													
Northern parula warbler	tv	c	May 9							sr			
Cape May warbler	tv	rare	May 11							tv	rare	Sept '06	
Yellow warbler	sr	c	May 1			yes	sr	c	yes	sr	unc		
Black-throated blue warbler	tv	c	May 3, 5				tv			sr	fc		June 13
Myrtle warbler	tv	fc					tv			sr	c		yes
Magnolia warbler	tv	fc					tv	c		sr	c		yes
Cerulean warbler	sr	unc	May 20	June 20									
Chestnut-sided warbler	sr	unc	May 7			yes	sr		yes	sr	fc		yes
Bay-breasted warbler	tv	c	May 20	May 29	Sept. 1		tv			tv			
Black-poll warbler	tv	c	May 20	June 3	Sept. 1		tv			tv	unc		
Blackburnian warbler	tv	c	May 2	May 29			tv			sr	c		yes
Yellow-throated warbler													
Black-throated green warbler	tv	c					tv			sr	c		yes
Pine warbler	tv				Sept. 22								
Palm warbler										tv	rare	13 Oct. '79	
Yellow palm warbler													
Prairie warbler													
Ovenbird	sr	c	May 8			yes	sr	c	yes	sr	c		yes
Water-thrush							sr			sr	unc		yes
Grinnell water thrush													
Louisiana water thrush							sr	July 3					
Kentucky warbler													
Connecticut warbler	tv	unc											
Mourning warbler										sr	unc		yes
Northern yellow-throat	sr	c				yes	sr	c	yes	sr	fc		yes
Yellow breasted chat							sr		yes				
Hooded warbler													
Wilson warbler										tv	rare		
Canadian warbler	tv	fc	May 17			June 16	sr			sr	c		June 6
American redstart	sr	c	May 14, 17			yes	sr	c	yes	sr	c		yes
American pipit										tv			
Mockingbird													
Catbird	sr	c	May 6			yes	sr	c	yes	sr	unc		yes
Brown thrasher	sr	c	May 5			yes	sr		yes	sr	local		
Carolina wren	av												
House wren	sr	c	May 5			yes	sr		yes				
Winter wren	tv, sr	local				June 16				sr	c		yes
Short-billed marsh wren													
Long-billed marsh wren	sr	c				yes							
Brown creeper	tv	c					wv			sr	fc		yes
White-breasted nuthatch	sr	c	Apr. 9, 11			yes	sr	c	yes	sr	rare		
Red-breasted nuthatch	res	c				yes	res			res	ab		yes
Brown-headed nuthatch	tv	c					res	irreg					
Tufted titmouse													
Chickadee	res	ab				yes	res	ab	yes	res	ab		yes
Carolina chickadee													
Hudsonian chickadee										res	unc		yes
Golden-crowned kinglet										sr, tv	fc, c		yes
Ruby-crowned kinglet	tv	c			Oct. 1		wv			tv	c		
Blue gray gnatcatcher	tv	c	Apr. 1				tv						
Townsend solitaire			Apr. 20	May 10									
Wood thrush													
Wilson thrush	sr	c				yes	sr		yes	sr	local		
Gray-cheeked thrush	sr	c	May 5, 7			yes	sr	c	yes	sr	unc		
Bicknell thrush	sr	c	May 7							tv			
Olive backed thrush							sr	local	June				
Hermit thrush										sr	fc		yes
American robin	tv	c					tv			sr	ab		yes
Varied thrush	sr, res	ab, oc	Feb. 25, Mar. 3			yes	sr	ab	yes	sr	c		yes
Wheatear													
Bluebird	sr	c	Mar. 2, 6			yes	sr	c	yes	sr	unc		yes

SPECIES RECORDED	HERKIMER					JEFFERSON			
	Resident or transient	Common or rare	Arrives from south	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Br
Rose-breasted grosbeak	sr	c	May 13	Sept. 5	yes				
Blue grosbeak									
Indigo bunting	sr		May 10, 16		yes	sr	unc		yes
Painted bunting									
Dickcissel									
Lark bunting									
Louisiana tanager									
Scarlet tanager	sr	c	May 20		yes				
Summer tanager									
Purple martin	sr	local			yes	sr	fc		yes
Cliff swallow	sr		Apr. 20		May 15	sr	fc		yes
Barn swallow	sr	c	Apr. 18, 25	Sept. 4	yes	sr	ab		yes
Tree swallow	sr	c	May 4		yes	sr	c		yes
Bank swallow	sr		Apr. 25		yes	sr	c		yes
Rough-winged swallow	sr		May 10						
Bohemian waxwing									
Cedar waxwing	res, sr	oc, c			yes	sr	c		yes
Northern shrike	wv	oc		Oct. 29					
Migrant shrike						sr	fc		yes
Red-eyed vireo	sr	c	May 10		yes	sr	fc	May 15	yes
Philadelphia vireo						tv		May 24	
Warbling vireo	sr	c	Apr. 26, May 1		yes	sr	fc	May 4	yes
Yellow-throated vireo	sr	unc				sr	unc		
Blue-headed vireo	sr	fc	May 7						
Plumbeous vireo									
White-eyed vireo	sr	(?)							
Black and white warbler	sr	unc	Apr. 29, May 7, 15	Aug. 19	yes	tv	c		
Prothonotary warbler									
Worm-eating warbler	tv	(?)		Sept. 24					
Blue-winged warbler									
Golden-winged warbler									
Lawrence warbler									
Brewster warbler									
Nashville warbler	tv	unc		Oct. 10					
Orange-crowned warbler									
Tennessee warbler									
Southern parula warbler									
Northern parula warbler	tv	unc	May 10						
Cape May warbler	tv	rare		Sept. 21, Oct. 12					
Yellow warbler	sr	c	Apr. 28, May 3		yes	sr	ab	May 2	yes
Black-throated blue warbler	sr	fc	May 1, 8		yes				
Myrtle warbler	tv, sr	c, local	Apr. 30, May 7	Oct. 4, 13, 24	May 26, June 15				
Magnolia warbler	tv, sr	c, fc	May 7		yes				
Cerulean warbler	tv	rare	May 5						
Chestnut-sided warbler	sr	unc	May 4, 10						
Bay-breasted warbler									
Black-poll warbler	tv					tv		May 22	
Blackburnian warbler	tv, sr	local	May 8	Aug. 20	yes				
Yellow-throated warbler									
Black-throated green warbler	tv, sr	ab, c	May 7	Oct. 8	yes				
Pine warbler	sr	local							
Palm warbler	tv			Oct. 20					
Yellow palm warbler	tv	rare							
Prairie warbler									
Ovenbird	sr		May 4, 13		yes	sr			yes
Water-thrush	sr	unc	May 6						
Grinnell water-thrush									
Louisiana water-thrush									
Kentucky warbler									
Connecticut warbler									
Mourning warbler	sr								
Northern yellow-throat	sr	c	May 5, 11, 20	Sept. 17, 24, Oct. 8	yes	sr	fc	May 7	yes
Yellow-breasted chat	sr	rare	May 20		yes				
Hooded warbler									
Wilson warbler									
Canadian warbler	tv		May 20			tv	c	May 15	
American redstart	sr		May 4, 10	Aug. 23	yes	sr			yes
American pipit									
Mockingbird									
Catbird	sr	c	May 10, 13	Sept. 16	yes	sr	c		yes
Brown thrasher	sr	rare	May 4, 10		yes	sr	fc		yes
Carolina wren									
House wren	sr	c			yes	sr	rare	May 1	yes
Winter wren	sr	c, local	Apr. 15	Oct. 26	June 10, 25				
Short-billed marsh wren	tv	rare							
Long-billed marsh wren	sr		May 15		yes	sr	ab		yes
Brown creeper	sr	c			May 2, June 2, July 18	tv			
White-breasted nuthatch	res				yes	res	c		yes
Red-breasted nuthatch	sr, res	fc, oc			May 30				
Brown-headed nuthatch									
Tufted titmouse									
Chickadee	res	c			yes	res	fc		yes
Carolina chickadee									
Hudsonian chickadee	res				17 July '98				
Golden-crowned kinglet	tv, sr	c, unc	Apr. 10	Nov. 1					
Ruby-crowned kinglet	tv	c	Apr., May 4			tv	unc	Apr. 29	
Blue-gray gnatcatcher									
Townsend solitaire									
Wood thrush	sr	local				sr			
Wilson thrush	sr	c	May 13		yes	sr	fc		
Gray-cheeked thrush									
Bicknell thrush									
Olive-backed thrush	tv, sr	c, local		Oct. 27	June 8, 10, 20				
Hermit thrush	sr			Oct. 26	May 23, June 2, 20				
American robin	sr	c	Mar. 7, 14	Nov. 1	yes	sr	c		yes
Varied thrush									
Wheatear									
Bluebird	sr	c	Mar. 10, 27	Oct. 20, 27	yes	sr	c	Mar.	yes

KINGS, QUEENS, NASSAU							LEWIS	
nt nt	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare
	c, unc	May 10, 16			Sept. 13, 23, 30	yes	sr	c
		May '43						
	fc	May 14, 16, 29			Sept. 18, Oct. 4, 11	June 9	sr	c
	c, 1841; 1891					1841, 1846		
	unc, c	May 7, 10, 15			Sept. 14, 24, 25	yes	sr	c
	3 times	May 14, 16						
	fc	Apr. 4, 20, May 8			Sept. 5, 17	yes	sr	c
	c	Apr. 23			Aug. 15, Oct. 11	yes	sr	c
	c	Apr. 15, 22, 28			Sept. 15, 22, Oct. 15	yes	sr	ab
	fc, ab	Apr. 1, 10, 28	May 11, 19	Sept. 10, 13, 19	Oct. 6, 9, 18	yes	sr	ab
	c, ab	Apr. 9, 18, May 18			Aug. 22, 24, Sept. 14	yes	sr	ab
	unc	Apr. 19						
	c	Mar. 23, Apr. 10, 18			Oct. 17, 25, Nov. 5	May 25, June 14	sr	c
	unc		Mar. 26	Nov. 6, 12, 18			wv	c
	rare			19 Sept. '75			sr	c
	c	May 5, 15, 22			Oct. 11, 12, 22	June 4	sr	ab
	rare			Sept. 14	Sept. 25		tv	unc
	rare	May 9				yes	sr	c
	c	Apr. 23, May 5, 13			Aug. 29	yes	sr	c
	oc	Apr. 30			Oct. 11		tv, sr	fc
	c	May 2, 5, 13			Aug. 8, Sept. 8, 19	May 24		
	c, oc	Apr. 19, 23, May 5	May 14		Sept. 23, 30, Oct. 24	yes	tv, sr	c, unc
	once	May '49						
	fc			Aug. 6	Sept. 16			
	fc	May 6, 10, 17	May 13			yes		
	rare	11 May '93						
		16 May '92						
	rare	May 4, 8, 11					tv	fc
	rare				Oct. 12 '92			
	rare, fall				Sept. 28		sr	unc
	c, local	May 7		Sept. 17	Oct. 11		tv, sr	c, unc
	rare		May 20	Sept. 12			tv	rare
	ab	Apr. 26, May 3, 9				May 21, 22, 30	sr	ab
	c	May 4, 10, 12	May 17, 20	Aug. 26, Sept. 15, 25	Oct. 3, 10, 17		tv, sr	c, local
	ab, unc	Apr. 10, 20, 27	May 10, 16	Oct. 5, 20, 25	Nov. 5, 16		tv, sr	c, local
	c	May 10, 11, 16	May 23, 25	Sept. 11, 29			tv, sr	fc, local
	rare						tv	very rare
	c, unc	May 5, 8, 15			Sept	yes	sr	c
	rare	May 2, 16	May 23	Sept. 25			tv	rare
	ab	May 12, 14, 17	May 23, 27, 30	Sept. 25	Oct. 18, 22		tv	fc
	fc	May 2, 12	May 24				tv, sr	c
	c	Apr. 26, May 5, 16		Sept. 15, 27	Oct. 6, 15		tv	ab
	unc, c	Apr. 1, 3, 22			Oct. 4, 7, Nov. 7			rare
	oc			Sept. 25	Oct. 7, 11		tv	fc
	fc	Apr. 14, 17, 25	May 2	Sept. 25, 26	Oct. 22, 26		tv	rare
	local	May 5			Oct. 22			
	ab	Apr. 27, May 4, 12			Sept. 4, 24, Oct. 23	June 3	sr	ab
	fc	May 2, 11		July 28, Sept. 3	Sept. 30, Oct. 6		tv	c
	rare	Apr. 12						
	rare	May 18						
	rare			Sept. 11, 26	Oct. 3			
	rare		June '62				tv, sr	rare
	ab	May 3, 12, 15			Oct. 5, 12, 17	May 30, June 13	sr	ab
	c	May 3, 5, 20			Aug. 15	May 27, June 3, 11		
	rare	Apr. 30	May 15				av	
	fc	May 13, 18	May 21				tv	rare
	fc	May 13, 18	May 24, 29	Aug. 8	Aug. 25		sr	c
	ab, fc	May 2, 5, 17		Aug. 8	Sept. 11, 15, 18	May 30, June 4, 8	sr	c
	ab, oc	Mar. 14, 19	Apr. 16, May 14	Sept. 13, 29	Nov. 6, 22		tv	unc
		Aug. 9			Aug. 27, Sept. 14, Nov. 7			
	ab, rare	May 3, 8, 14			Sept. 29, Oct. 5, Nov. 25	May 16, June 3	sr	ab
	c	Apr. 2, 28, 30			Oct. 11, 12, Nov. 3	May 9, 16, 30	tv, sr	fc, local
	rare, local	Mar. 20, 25			Nov. 22	June		
	fc	Apr. 29, May 9, 14			Sept. 16, 24, Oct. 6	May 17, June 6	sr	ab
	fc		May 5, 20	Oct. 6, 17			tv, sr	c
							tv	rare
	ab	Apr. 8, 30, May 15			Oct. 1, 26	June 9, 16, July 11	tv	rare
	ab, fc		Apr. 20, May 4, 16	Oct. 6, 12, 22			tv, sr	c
	c, oc						res	c
	irreg		May 11	Sept. 6, Oct. 5			tv, res	c
	rare							
	ab, fc					yes	res	c
								local
	c		Apr. 15, May 2, 7	Sept. 24, Oct. 12, Nov. 5			tv, res	c, oc
	c	Apr. 1, 7, 12	May 16	Oct. 6, 11	Oct. 22, Nov. 2, 7		tv	c
	rare	Apr. 18			Oct. 11			
	c	Apr. 29, May 3, 10			Sept. 11, 26, Oct. 29	May 16, 22, 29		
	fc, unc	May 11			Oct. 3, 22, Nov. 5	May 30	sr	ab
	c		May 30	Sept. 17	Oct. 12		tv	unc
	rare			Sept. 30	Oct. 3, 23		tv	rare
	c	May 16, 17, 19	May 21, 26	Sept. 18	Oct. 6, 12		tv, sr	c
	c, rare	Mar. 21, Apr. 7, 29	May 10, 17, 22	Oct. 8, 14, 25	Nov. 8, 24		tv, sr	ab
	ab, rare	Feb. 12, 22, Mar. 18			Nov. 8, 15, Dec. 16	yes	sr	ab
				1885				
	c, rare	Feb. 10, Mar. 12, 27			Oct. 25, Nov. 9, 17	Apr. 26, May 20, June 25	sr	c

SPECIES RECORDED	HERKIMER					JEFFERSON				KINGS, QUEENS, NASSAU							LEWIS	
	Resident or transient	Common or rare	Arrives from south	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare
Rose-breasted grosbeak	sr	c	May 13	Sept. 5	yes					tv, sr	c, unc	May 10, 16			Sept. 13, 23, 30	yes	sr	c
Blue grosbeak						sr	unc		yes	av		May '43						
Indigo bunting	sr		May 10, 16		yes					sr	fc	May 14, 16, 29			Sept. 18, Oct. 4, 11	June 9	sr	c
Painted bunting										av						1841, 1846		
Dickcissel										sr, av	c, 1841; 1891							
Lark bunting																		
Louisiana tanager					yes					sr, tv	unc, c	May 7, 10, 15			Sept 14, 24, 25	yes	sr	a
Scarlet tanager	sr	c	May 20							av	3 times	May 14, 16						
Summer tanager					yes	sr	fc		yes	sr	fc	Apr. 4, 20, May 8			Sept. 5, 17	yes	sr	c
Purple martin	sr	local			May 15	sr	fc		yes	sr	c	Apr. 23			Aug 15, Oct 11	yes	sr	c
Cliff swallow	sr		Apr. 20		yes	sr	ab		yes	sr	c	Apr. 15, 22, 28			Sept. 15, 22, Oct. 15	yes	sr	ab
Barn swallow	sr	c	Apr. 18, 25	Sept. 4	yes	sr	c		yes	sr, tv	fc, ab	Apr. 1, 10, 28	May 11, 10	Sept. 10, 13, 19	Oct. 6, 9, 18	yes	sr	ab
Tree swallow	sr	c	May 4		yes	sr	c		yes	sr, tv	c, ab	Apr. 9, 18, May 18			Aug. 22, 24, Sept 14	yes	sr	ab
Bank swallow	sr		Apr. 25		yes						unc	Apr. 19						
Rough-winged swallow	sr		May 10							av								
Bohemian waxwing															Oct. 17, 25, Nov. 5	May 25, June 14	sr	c
Cedar waxwing	res, sr	oc, c			yes	sr	c		yes	sr	c	Mar 23, Apr. 10, 18					wv	c
Northern shrike	wv	oc		Oct. 29						wv	unc		Mar. 26	Nov. 6, 12, 18			sr	c
Migrant shrike						sr	fc		yes	tv	rare			19 Sept. '75			sr	ab
Red-eyed vireo	sr	c	May 10		yes	sr	fc	May 15	yes	sr	c	May 5, 15, 22			Oct. 11, 12, 22	June 4	tv	unc
Philadelphia vireo						tv		May 24		tv	rare			Sept. 14	Sept. 25		sr	c
Warbling vireo	sr	c	Apr. 26, May 1		yes	sr	fc	May 4	yes	tv	rare	May 9				yes	sp	c
Yellow-throated vireo	sr	unc				sr	unc			sr	c	Apr. 23, May 5, 13			Aug 29	yes	tv, sr	fc
Blue-headed vireo	sr	fc	May 7							tv	oc	Apr. 30			Oct. 11			
Plumbeous vireo																		
White-eyed vireo	sr	(?)								sr	c	May 2, 5, 13			Aug. 8, Sept. 8, 19	May 24	tv, sr	c, unc
Black and white warbler	sr	unc	Apr. 29, May 7, 15	Aug. 19	yes	tv	c			tv, sr	c, oc	Apr. 19, 23, May 5	May 14		Sept. 23, 30, Oct. 24	yes		
Prothonotary warbler										av	once	May '49		Aug 6				
Worm-eating warbler	tv	(?)		Sept. 24						tv	fc				Sept 16	yes		
Blue-winged warbler										sr	fc	May 6, 10, 17	May 13					
Golden-winged warbler										tv	rare	11 May '93						
Lawrence warbler																		
Brewster warbler										av		16 May '92					tv	fc
Nashville warbler	tv	unc		Oct. 10						tv	rare	May 4, 8, 11			Oct. 12 '92			
Orange-crowned warbler										tv	rare				Sept. 28		sr	unc
Tennessee warbler										tv	rare, fall							
Southern parula warbler																	tv, sr	c, unc
Northern parula warbler	tv	unc	May 10							tv, sr	c, local	May 7		Sept 17	Oct. 11		tv	rare
Cape May warbler	tv	rare		Sept. 21, Oct. 12						tv	rare		May 20	Sept. 12			sr	ab
Yellow warbler	sr	c	Apr. 28, May 3		yes	sr	ab	May 2	yes	sr	ab	Apr. 26, May 3, 9				May 21, 22, 30	tv, sr	c, local
Black-throated blue warbler	sr	fc	May 1, 8		yes					tv	c	May 4, 10, 12	May 17, 20	Aug 26, Sept 15, 25	Oct 3, 10, 17		tv, sr	c, local
Myrtle warbler	tv, sr	c, local	Apr. 30, May 7	Oct. 4, 13, 24	May 26, June 15					tv, wv	ab, unc	Apr. 10, 20, 27	May 10, 16	Oct 5, 20, 25	Nov. 5, 16		tv, sr	fc, local
Magnolia warbler	tv, sr	c, fc	May 7		yes					tv	c	May 10, 11, 16	May 23, 25	Sept. 11, 29			tv	very rare
Cerulean warbler	tv	rare	May 5								rare					yes	sr	c
Chestnut-sided warbler	sr	unc	May 4, 10							tv, sr	c, unc	May 5, 8, 15		Sept 25	Sept		tv	rare
Bay-breasted warbler						tv		May 22		tv	rare	May 2, 16	May 23	Sept. 25			tv	fc
Black-poll warbler	tv									tv	ab	May 12, 14, 17	May 23, 27, 30	Sept. 25	Oct. 18, 22		tv, sr	c
Blackburnian warbler	tv, sr	local	May 8	Aug. 20	yes					tv	fc	May 2, 12	May 24					
Yellow-throated warbler										av							tv	ab
Black throated green warbler	tv, sr	ab, c	May 7	Oct. 8	yes					tv	c	Apr. 26, May 5, 16		Sept. 15, 27	Oct. 6, 15			rare
Pine warbler	sr	local								sr, tv	unc, c	Apr. 1, 3, 22			Oct. 4, 7, Nov. 7		tv	fc
Palm warbler	tv			Oct. 20						tv	oc			Sept. 25	Oct. 7, 11		tv	rare
Yellow palm warbler	tv	rare								tv	fc	Apr. 14, 17, 25	May 2	Sept. 25, 26	Oct. 22, 26			
Prairie warbler										sr	local	May 5			Oct. 22		sr	ab
Ovenbird	sr		May 4, 13		yes	sr			yes	sr	ab	Apr. 27, May 4, 12			Sept. 4, 24, Oct. 23	June 3	tv	c
Water-thrush	sr	unc	May 6							tv	fc	May 2, 11		July 28, Sept. 3	Sept. 30, Oct. 6			
Grinnell water-thrush																		
Louisiana water-thrush											rare	Apr. 12						
Kentucky warbler											rare	May 18		Sept. 11, 26	Oct. 3		tv, sr	rare
Connecticut warbler										tv	rare					May 30, June 13	sr	ab
Mourning warbler	sr									tv	rare		June '62		Oct. 5, 12, 17	May 27, June 3, 11		
Northern yellow-throat	sr	c	May 5, 11, 20	Sept. 17, 24, Oct. 8	yes	sr	fc	May 7	yes	sr	ab	May 3, 12, 15			Aug. 15		av	
Yellow-breasted chat	sr	rare	May 20		yes					sr	c	May 3, 5, 20					tv	rare
Hooded warbler										tv	rare	Apr. 30	May 15				sr	c
Wilson warbler										tv	fc	May 13, 18	May 21	Aug. 8	Aug 25		sr	c
Canadian warbler	tv		May 20			tv	c	May 15		tv	fc	May 13, 18	May 24, 29	Aug. 8	Sept. 11, 15, 18	May 10, June 4, 8	tv	unc
American redstart	sr		May 4, 10	Aug. 23	yes	sr			yes	tv, sr	ab, fc	May 2, 5, 17		Sept. 13, 29	Nov. 6, 22			
American pipit										tv, wv	ab, oc	Mar. 14, 19	Apr. 16, May 14		Aug. 27, Sept. 14, Nov. 7		sr	ab
Mocking bird										av, sr (?)		Aug 9			Sept. 30, Oct. 5, Nov. 25	May 16, June 3	tv, sr	fc, local
Catbird	sr	c	May 10, 13	Sept. 16	yes	sr	c		yes	sr, res	ab, rare	May 3, 8, 14			Oct. 11, 12, Nov. 3	May 9, 16, 30		
Brown thrasher	sr	rare	May 4, 10		yes	sr	fc		yes	sr	c	Apr. 2, 28, 30			Nov. 22	June	sr	ab
Carolina wren										res	rare, local	Mar. 20, 25			Sept. 16, 24, Oct. 6	May 17, June 6	tv, sr	c
House wren	sr	c			yes	sr	rare	May 1	yes	sr	fc	Apr. 29, May 9, 14		Oct. 6, 17			tv	rare
Winter wren	sr	c, local	Apr. 15	Oct. 26	June 10, 25					wv	fc		May 5, 20			June 9, 10, July 11	tv	rare
Short-billed marsh wren	tv	rare													Oct. 1, 20		tv, sr	c
Long billed marsh wren	sr		May 15		yes	sr	ab		yes	sr	ab	Apr. 8, 30, May 15					ps	c
Brown creeper	sr	c			May 2, June 2, July 18	tv				tv, wv	ab, fc		Apr. 20, May 4, 16	Oct 6, 12, 22			tv, res	c
White-breasted nuthatch	res				yes	res	c		yes	tv, res	c, oc			Sept 6, Oct. 5				
Red-breasted nuthatch	sr, res	fc, oc			May 30					wv, tv	irreg		May 11					
Brown-headed nuthatch																yes	res	c
Tufted titmouse											rare							
Chickadee	res	c			yes	res	fc		yes	wv, sr	ab, fc							local
Carolina chickadee																	tv, res	c, oc
Hudsonian chickadee	res				17 July '98					wv	c						tv	c
Golden crowned kinglet	tv, sr	c, unc	Apr. 10	Nov. 1						tv	c		Apr. 15, May 2, 7	Sept 24, Oct 12, Nov 5				
Ruby crowned kinglet	tv	c	Apr., May 4			tv	unc	Apr. 29			c	Apr. 1, 7, 12	May 16	Oct. 6, 11	Oct. 22, Nov. 2, 7			
Blue-gray gnatcatcher											rare	Apr. 18			Oct 11			
Townsend solitaire										sr								
Wood thrush	sr	local				sr					c	Apr. 29, May 3, 10			Sept 11, 26 Oct 29	May 16, 22, 29	sr	ab
Wilson thrush	sr	c	May 13		yes	sr	fc			tv, sr	fc, unc	May 11		Sept 17	Oct 1, 22, Nov 5	May 30	tv	unc
Gray checked thrush										tv	c		May 30	Sept 19	Oct 12		tv	rare
Bicknell thrush										tv	rare			Sept 18	Oct 1, 21		tv, sr	c
Olive backed thrush	tv, sr	c, local		Oct. 27	June 8, 19, 20					tv	c	May 16, 17, 19	May 21, 26	'Oct 8, 14, 25	Oct 6, 12		tv, sr	ab
Hermit thrush	sr			Oct 26	May 23, June 2, 20					tv, wv	c, rare	Mar. 21, Apr 7, 20	May 19, 17, 22		Nov 8, 24	yes	sr	ab
American robin	sr		Mar. 7, 14	Nov. 1	yes	sr	c		yes	sr, res	ab, rare	Feb. 12, 22, Mar 18			Nov. 8, 15, Dec 16			
Varied thrush										av				1885				
Wheatear															Oct 25, Nov 9, 17	Apr 26, May 20, June 25	sr	c
Bluebird	sr	c	Mar 10, 27	Oct. 20, 27	yes	sr	c	Mar	yes	sr, res	c, rare	Feb. 10, Mar 12, 27						

SPECIES RECORDED	LEWIS (*continued*)						
	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Com o ra
Rose-breasted grosbeak	May 3, 12, 24			Aug. 1, 14	yes	sr	
Blue grosbeak							
Indigo bunting	May 2, 16, 20			Aug. 15, Sept. 22	yes	sr	fc
Painted bunting						(?)	
Dickcissel							
Lark bunting							
Louisiana tanager							
Scarlet tanager	May 8, 11, 14			Aug. 9, 28	yes	sr	unc
Summer tanager							
Purple martin	Apr. 21, 24, May 3			Aug. 10, 18	yes	sr	unc
Cliff swallow	Apr. 14, 20, May 3			Aug. 23, Sept. 5	yes	sr	
Barn swallow	Apr. 14, 20, 22			Aug. 25, Sept. 1, 23	yes	sr	c
Tree swallow	Apr. 8, 18, May 10			Sept. 2	yes	sr	
Bank swallow	Apr., May 5, 10			July, Aug. 16	yes	sr	
Rough-winged swallow							
Bohemian waxwing							
Cedar waxwing	Mar. 19, May 10, 31			Sept. 13, Oct. 3	yes	sr	ab
Northern shrike		Mar., Apr. 12, 18	Nov. 7, 16, Dec. 3			wv	rare
Migrant shrike	May 10, 12			Aug. 10, 19, Sept. 2	yes	sr	unc
Red-eyed vireo	May 4, 10, 20			Sept. 13, 24, Oct. 11	yes	sr	c
Philadelphia vireo	May 12						
Warbling vireo	May 10, 14			Aug. 27	yes	sr	c
Yellow-throated vireo	May 7, 12, 14			Aug. 23, Sept. 1	yes	sr	
Blue-headed vireo	Apr. 24, May 10, 13			Aug. 22, Oct. 10	yes	tv	unc
Plumbeous vireo							
White-eyed vireo							
Black and white warbler	Apr. 20, May 7, 12			Sept. 2, Oct. 8	yes	sr	unc
Prothonotary warbler							
Worm-eating warbler							
Blue-winged warbler							
Golden-winged warbler							
Lawrence warbler							
Brewster warbler							
Nashville warbler	Apr. 24, May 4, 10			Aug. 21, Sept. 27		tv	fc
Orange-crowned warbler						tv	rare
Tennessee warbler	May 14, 15, 19			Sept. 4		tv	rare
Southern parula warbler							
Northern parula warbler	May 3, 6, 10			Sept. 2	yes	tv	fc
Cape May warbler			Aug. 26			tv	rare
Yellow warbler	May 5, 7, 12			Aug. 12, 18, 20	yes	sr	c
Black-throated blue warbler	May 4, 7, 10			Sept. 11	yes	tv, sr	c, local
Myrtle warbler	Apr. 20, 30, May 2			Oct. 16, 23	yes	tv	c
Magnolia warbler	May 7, 13, 21			Sept. 4, 19	yes	sr, tv	oc, c
Cerulean warbler	May 5, 7					sr	local
Chestnut-sided warbler	May 4, 7, 13			Sept. 4, 19	yes	tv	fc
Bay-breasted warbler	May 13, 16, 26					tv	fc
Black-poll warbler	June 1			Sept. 4		tv	c
Blackburnian warbler	Apr. 29, May 11, 21	May 23		Aug. 29, Sept. 9	yes	tv	c
Yellow-throated warbler							
Black-throated green warbler	Apr. 27, May 10, 13			Aug. 26, Sept. 28		tv, sr	c, unc
Pine warbler	May 8						
Palm warbler	May 1		Sept. 27, Oct. 5, 7	Oct. 9, 12		tv	rare
Yellow palm warbler							
Prairie warbler							
Ovenbird	May 3, 8, 10			Sept. 17, Oct. 4	yes	sr	c
Water-thrush	Apr. 30, May 17			Sept. 1, 9		tv	fc
Grinnell water-thrush							
Louisiana water-thrush						sr	local
Kentucky warbler							
Connecticut warbler							
Mourning warbler	May 22, 24, 31			Aug. 15, 28	yes	tv, sr	fc, local
Northern yellow-throat	May 11, 18, 24			Aug. 13, Sept. 22	yes	sr	c
Yellow-breasted chat						sr	fc, local
Hooded warbler			9 Sept. '78				
Wilson warbler	May 23		Aug. 28, Sept. 8	Sept. 25			
Canadian warbler	May 14, 16, 23			Aug. 23, Sept. 11	yes		
American redstart	May 3, 8, 15			Sept. 10, 22	yes	sr	
American pipit	May 6, 15	May 16, 21	Sept. 21, Oct. 18	Sept. 29, Oct. 20, Nov. 3			
Mockingbird							
Catbird	May 9, 11, 23			Sept. 14, 28, Oct. 6	yes	sr	ab
Brown thrasher	May 7, 8, 13					sr	fc
Carolina wren							
House wren	Apr. 30, May 4, 22			Sept. 10, 12	yes	sr	rare
Winter wren	Apr. 2, 10, 16			Oct. 10	June 17, July 8, 29		
Short-billed marsh wren				Oct. 27	?		
Long-billed marsh wren						sr	
Brown creeper	Feb. 9, Apr. 4, 30			Oct. 9, Nov. 12	yes	tv	c
White-breasted nuthatch					yes	res	c
Red-breasted nuthatch					yes		
Brown-headed nuthatch							
Tufted titmouse							
Chickadee					yes	res	c
Carolina chickadee							
Hudsonian chickadee					yes		
Golden-crowned kinglet	Apr. 2, 5, 18			Oct. 18, 20, Nov. 6		wv, tv	fc, c
Ruby-crowned kinglet	Apr. 15, 17, 28	May 4, 18	Sept. 27, 28, 30	Oct. 18, 20, 24		tv	c
Blue-gray gnatcatcher							
Townsend solitaire							
Wood thrush						sr	fc
Wilson thrush	May 6, 10, 14			Sept. 1	yes	sr	
Gray-cheeked thrush	May 24						
Bicknell thrush	24 May '78						
Olive-backed thrush	May 10, 15, 23			Sept. 8, Oct. 1, 6	yes		
Hermit thrush	Apr. 2, 9, 23			Oct. 2, 18, 23	May 30, June 15, Aug. 24	tv	c
American robin	Feb. 15, Mar. 8, 26			Oct. 20, Nov. 8 16	yes	sr, res	ab, oc
Varied thrush							
Wheatear							
Bluebird	Feb. 28, Mar. 18, 25			Oct. 16, 20, 29	yes	sr	c

LIVINGSTON					MADISON						
ves m th	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds
					sr	c	May 2				yes
				yes	sr	c	May 9				yes
				yes	sr	fc	May 10				yes
				yes	sr	rare					yes
				yes	sr	ab	Apr. 20, 30				yes
				yes	sr	ab	Apr. 15, 25				yes
				yes	sr	c	Apr. 3, 10				yes
					sr	c	Apr. 25				yes
					sr	fc	May 12				yes
					wv	rare			4 Feb. '96		
				yes	sr, res	ab, oc					yes
	Apr. 15	Nov. 15			wv	fc		Mar	Nov. 1		
			Sept. 20	yes	sr	fc	Mar. 30				yes
				yes	sr	ab	May 5, 8			Sept. 20	yes
					tv	unc	May 4, 7			Sept. 16	
			Sept	yes	sr	ab	May 2			Sept. 8, 15	yes
					sr	fc	May 12			Sept. 8	yes
					tv, sr	fc, oc					
					av	once			24 Sept. '93		
			Oct. 15	yes	tv, sr	c, unc	May 6				
					tv	fc	May 5	May 15			
					tv	rare	May 15				
					tv	fc	May 8				
					tv, sr	ab, oc	May 5				
					tv	rare	May 11				
			Sept. 20	yes	sr	ab	May 2				yes
					tv, sr	ab, unc	May 5				June 7
					tv	ab	Apr. 25				
					tv, sr	c, unc	May 10				June 7, 27
					sr	local	May 15				yes
			Aug. 25		sr	c	May 10				June 1
					tv	c, irreg	May 20				
					tv	ab	May 20				
					tv, sr	c, unc	May 5				June 10, 16
					tv, sr	c, fc	May 10				yes
					tv	unc					
			Sept. 12	yes	sr	ab	May 5				yes
					tv, sr	c, unc	May 2				yes
					tv	rare, fall					
					sr	oc	May 10				
			Sept. 15	yes	sr	ab	May 1				yes
				yes	sr	rare					
					sr	local	May 29				yes
					tv	fc	May 15, 20		Sept. 1		
					tv, sr	c, local	May 10				June 6
					sr	c	May 1, 5			Sept. 3	yes
					tv	ab, fall			Sept. 18	Nov. 6	
				yes	sr	ab	May 8, 10			Sept. 25	yes
			Sept. 30	yes	sr	rare	May 12				
				yes	sr	fc	Apr. 30, May 5				yes
					tv, res	c, oc					yes
				yes	sr	c, local	May 15				yes
			Oct.		tv, res.	ab, unc	Apr. 1				yes
				yes	res	c					yes
					wv, res	c, irreg, unc		May 10	Oct. 2		
				yes	res	ab					yes
	Apr. 15, 30	Oct. 20			tv, wv	ab, oc	Apr. 10	May 7	Oct.		
	May 15	Sept. 15	Oct. 15		tv	c	Apr. 14	May 7	Oct. 7	Oct. 24	
			Oct. 13	yes	sr	fc	May 5			Sept. 28	yes
					sr	c	May 10			Sept. 24	yes
					tv	fc					
					tv	c	May 10				
					tv, sr	c, local	May 1	May 15		Sept. 28	yes
				yes	sr	ab	Mar. 8, 20			Oct. 25	yes
15				yes	sr	ab	Mar. 10, Apr. 1			Oct. 25	yes

SPECIES RECORDED	LEWIS (*continued*)					LIVINGSTON							MADISON						
	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds
Rose-breasted grosbeak	May 3, 12, 24			Aug. 1, 14	yes	sr							sr	c	May 2				yes
Blue grosbeak																			
Indigo bunting	May 2, 16, 20			Aug. 15, Sept. 22	yes	sr	fc					yes	sr	c	May 9				yes
Painted bunting						(?)													
Dickcissel																			
Lark bunting																			
Louisiana tanager				Aug. 9, 28	yes	sr	unc	May 15				yes	sr	fc	May 10				yes
Scarlet tanager	May 8, 11, 14																		
Summer tanager				Aug. 10, 18	yes	sr	unc					yes	sr	rare					yes
Purple martin	Apr. 21, 24, May 3			Aug. 23, Sept. 5	yes	sr						yes	sr	ab	Apr. 20, 30				yes
Cliff swallow	Apr. 14, 20, May 3			Aug. 25, Sept. 1, 23	yes	sr	c					yes	sr	ab	Apr. 15, 25				yes
Barn swallow	Apr. 14, 20, 22			Sept. 2	yes	sr						yes	sr	c	Apr. 3, 10				yes
Tree swallow	Apr. 8, 18, May 10			July, Aug. 16	yes	sr							sr	c	Apr 25				yes
Bank swallow	Apr., May 5, 10												sr	fc	May 12				yes
Rough-winged swallow													wv	rare			5 Feb. '96		
Bohemian waxwing				Sept. 13, Oct. 3	yes	sr	ab					yes	sr, res	ab, oc					yes
Cedar waxwing	Mar. 19, May 10, 31					wv	rare		Apr. 15	Nov. 15			wv	fc		Mar.	Nov. 1		
Northern shrike		Mar., Apr. 12, 18	Nov. 7, 16, Dec. 3			sr	unc				Sept. 20	yes	sr	fc	Mar. 30				yes
Migrant shrike	May 10, 12			Aug. 10, 19, Sept. 2	yes	sr	c					yes	sr	ab	May 5, 8			Sept. 20	yes
Red-eyed vireo	May 4, 10, 20			Sept. 13, 24, Oct. 11	yes								tv	unc	May 4, 7			Sept. 16	
Philadelphia vireo	May 12					sr	c	May 5			Sept	yes	sr	ab	May 2			Sept 8, 15	yes
Warbling vireo	May 10, 14			Aug. 27	yes	sr							sr	fc	May 12			Sept. 8	yes
Yellow-throated vireo	May 7, 12, 14			Aug. 23, Sept. 1	yes	tv	unc						tv, sr	fc, oc					
Blue-headed vireo	Apr. 24, May 10, 13			Aug. 22, Oct. 10	yes								av	once			24 Sept. '93		
Plumbeous vireo																			
White-eyed vireo																			
Black and white warbler	Apr. 20, May 7, 12			Sept. 2, Oct. 8	yes	sr	unc	May 1, 5			Oct. 15	yes	tv, sr	c, unc	May 6				
Prothonotary warbler																			
Worm-eating warbler																			
Blue-winged warbler																			
Golden-winged warbler																			
Lawrence warbler																			
Brewster warbler													tv	fc	May 5	May 15			
Nashville warbler	Apr. 24, May 4, 10			Aug. 21, Sept. 27		tv	fc						tv	rare	May 15				
Orange-crowned warbler						tv	rare						tv	fc	May 8				
Tennessee warbler	May 14, 15, 19			Sept. 4		tv	rare												
Southern parula warbler													tv, sr	ab, oc	May 5				
Northern parula warbler	May 3, 6, 10			Sept. 2	yes	tv	fc						tv	rare	May 11				
Cape May warbler			Aug 26			tv	rare						sr	ab	May 2				yes
Yellow warbler	May 5, 7, 12			Aug 12, 18, 20	yes	sr	c	May 1			Sept 20	yes	tv, sr	ab, unc	May 5				June 7
Black-throated blue warbler	May 4, 7, 10			Sept. 11	yes	tv, sr	c, local						tv	ab	Apr. 25				
Myrtle warbler	Apr. 20, 30, May 2			Oct. 16, 23	yes	tv	c						tv, sr	c, unc	May 10				June 7, 27
Magnolia warbler	May 7, 13, 21			Sept. 4, 19	yes	sr, tv	oc, c						sr	local	May 15				yes
Cerulean warbler	May 5, 7					sr	local						sr	c	May 10				June 1
Chestnut-sided warbler	May 4, 7, 13			Sept. 4, 19	yes	tv	fc	May 15			Aug. 25		tv	c, irreg	May 20				
Bay-breasted warbler	May 13, 16, 26					tv	fc						tv	ab	May 20				
Black-poll warbler	June 1			Sept. 4		tv	c						tv, sr	c, unc	May 5				June 10, 16
Blackburnian warbler	Apr. 29, May 11, 21	May 23		Aug. 29, Sept. 9	yes	tv	c												
Yellow-throated warbler													tv, sr	c, fc	May 10				yes
Black-throated green warbler	Apr. 27, May 10, 13			Aug. 26, Sept. 28		tv, sr	c, unc												
Pine warbler	May 8												tv	unc					
Palm warbler	May 1		Sept. 27, Oct. 5, 7	Oct. 9, 12		tv	rare												
Yellow palm warbler																			yes
Prairie warbler													sr	ab	May 5				yes
Ovenbird	May 3, 8, 10			Sept. 17, Oct. 4	yes	sr	c	May 4			Sept. 12	yes	tv, sr	c, unc	May 2				
Water-thrush	Apr. 30, May 17			Sept. 1, 9		tv	fc												
Grinnell water-thrush																			
Louisiana water-thrush						sr	local												
Kentucky warbler													tv	rare, fall					
Connecticut warbler													sr	oc	May 10				yes
Mourning warbler	May 22, 24, 31			Aug. 15, 28	yes	tv, sr	fc, local						sr	ab	May 1				
Northern yellow-throat	May 11, 18, 24			Aug. 13, Sept. 22	yes	sr	c	May 6			Sept. 15	yes	sr	rare					yes
Yellow-breasted chat						sr	fc, local					yes	sr	local	May 29				
Hooded warbler			9 Sept. '78										tv	fc	May 15, 20		Sept. 1		
Wilson warbler	May 23		Aug. 28, Sept. 8	Sept. 25									tv, sr	c, local	May 10				June 6
Canadian warbler	May 14, 16, 23			Aug. 23, Sept. 11	yes								sr	c	May 1, 5			Sept. 3	yes
American redstart	May 3, 8, 15			Sept. 10, 22	yes	sr							tv	ab, fall			Sept. 18	Nov. 6	
American pipit	May 6, 15	May 16, 21	Sept. 21, Oct. 18	Sept. 29, Oct. 20, Nov. 3															
Mockingbird													sr	ab	May 8, 10			Sept. 25	yes
Catbird	May 9, 11, 23			Sept. 14, 28, Oct. 6	yes	sr	ab	May 13				yes	sr	rare	May 12				
Brown thrasher	May 7, 8, 13					sr	fc	Apr. 25			Sept. 30	yes							yes
Carolina wren							rare	May 5				yes	sr	fc	Apr. 30, May 5				yes
House wren	Apr. 30, May 4, 22			Sept. 10, 12	yes	sr							tv, res	c, oc					yes
Winter wren	Apr. 2, 10, 16			Oct. 10	June 17, July 8, 20							yes	sr	c, local	May 15				yes
Short-billed marsh wren				Oct 27	?	sr		Apr. 15			Oct		tv, res	ab, unc	Apr. 1				yes
Long-billed marsh wren						tv	c					yes	res	c		May 10	Oct. 2		
Brown creeper	Feb. 9, Apr. 4, 30			Oct. 9, Nov. 12	yes	res	c						wv, res	c, irreg, unc					
White-breasted nuthatch					yes														yes
Red-breasted nuthatch					yes								res	ab					
Brown-headed nuthatch												yes							
Tufted titmouse					yes	res	c												
Chickadee													tv, wv	ab, oc	Apr. 10	May 7	Oct.		
Carolina chickadee					yes				Apr. 15, 30	Oct. 20			tv	c	Apr. 14	May 7	Oct 7	Oct 24	
Hudsonian chickadee																			
Golden-crowned kinglet	Apr 2, 5, 18			Oct. 18, 20, Nov. 6		wv, tv	fc, c	Apr. 15	May 15	Sept. 15	Oct. 15								
Ruby crowned kinglet	Apr. 15, 17, 28	May 4, 18	Sept. 27, 28, 30	Oct. 18, 20, 24		tv	c											Sept 28	yes
Blue-gray gnatcatcher																		Sept. 24	yes
Townsend solitaire													sr	fc	May 5				
Wood thrush						sr	fc	May 3			Oct 13	yes	sr	c	May 10				
Wilson thrush	May 6, 10, 14			Sept. 1	yes	sr							tv	fc					
Gray-cheeked thrush	May 24																		
Bicknell thrush	24 May '78												tv	c	May 10			Sept 28	yes
Olive-backed thrush	May 10, 15, 23			Sept. 8, Oct. 1, 6	yes								tv, sr	c, local	May 1	May 15		Oct 25	yes
Hermit thrush	Apr. 2, 9, 23			Oct. 2, 18, 23	May 30, June 15, Aug. 24	tv	c					yes	sr	ab	Mar. 8, 20				
American robin	Feb. 15, Mar 8, 26			Oct. 20, Nov. 8 16	yes	sr, res	ab, oc	Mar. 11											
Varied thrush																		Oct 25	yes
Wheatear												yes	sr	ab	Mar. 10, Apr. 1				
Bluebird	Feb. 28, Mar. 18, 25			Oct. 16, 20, 29	yes	sr	c	Mar. 6, 15											

SPECIES RECORDED	MONROE							MONTGOMER	
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Co
Rose-breasted grosbeak	tv, sr	c, unc	Apr. 24, May 2, 8				yes	sr	
Blue grosbeak									
Indigo bunting	sr	c	May 4, 8, 12				yes	sr	
Painted bunting									
Dickcissel									
Lark bunting									
Louisiana tanager									
Scarlet tanager	sr, tv	unc, c	May 2, 4, 9				yes	sr	
Summer tanager									
Purple martin	sr	unc	Apr. 13, 17				yes	sr	
Cliff swallow	sr	local	Apr. 26, 30			Sept. 10	yes	sr	
Barn swallow	sr	ab	Apr. 12, 18, 20			Sept. 10	yes	sr	
Tree swallow	sr, tv	fc, ab	Mar. 27, Apr. 3, 12			Sept. 30	yes	sr	
Bank swallow	sr	ab	Apr. 19, 24, 27			Aug. 20	yes	sr	
Rough-winged swallow	sr	fc	Apr. 22, 26				yes		
Bohemian waxwing	wv	rare							
Cedar waxwing	sr, res	c, oc					yes	sr	c
Northern shrike	wv	unc		Apr. 1, 12	Nov			wv	
Migrant shrike	sr	fc	Mar. 22, 24, 30				yes	sr	
Red-eyed vireo	sr	ab	May 3, 6, 10			Sept. 20	yes	sr	c
Philadelphia vireo	tv	fc	May 3, 10, 23	May 20, 24					
Warbling vireo	sr	c	Apr. 30, May 3, 7			Sept. 15	yes	sr	c
Yellow-throated vireo	tv, sr	c, fc	Apr. 30, May 3, 10				yes	sr	
Blue-headed vireo	tv	fc	Apr. 24, 29, May 5					tv	
Plumbeous vireo									
White-eyed vireo	sr	rare					yes		
Black and white warbler	tv, sr	ab, oc	Apr. 23, 26, 28	May 21			yes	tv	c
Prothonotary warbler									
Worm-eating warbler	av	rare	May 3, 25						
Blue-winged warbler		rare	May 3, 13						
Golden-winged warbler	sr	unc	May 17, 25				yes		
Lawrence warbler									
Brewster warbler									
Nashville warbler	tv, sr	c, oc	Apr. 29, May 3, 5	May 21, 30	Aug. 7, 30	Oct. 11	yes	tv	
Orange-crowned warbler	tv	unc	May 6, 8, 14	May 17	Sept. 25	Oct. 12			
Tennessee warbler	tv	unc	May 12, 14	May 22, 26					
Southern parula warbler									
Northern parula warbler	tv	c	Apr. 26, May 1, 5	May 17, 27				tv	
Cape May warbler	tv	unc	May 4, 7, 10	May 12, 14					
Yellow warbler	sr	ab	Apr. 28, 30, May 4				May 25	sr	c
Black-throated blue warbler	tv, sr	ab, local	Apr. 26, 30, May 3	May 17, 24				tv	
Myrtle warbler	tv	ab	Apr. 22, 26, 29	May 19, 21	Sept. 30	Oct. 20		tv	
Magnolia warbler	tv, sr	c, oc	May 3, 5, 12	May 20, 31				tv	
Cerulean warbler	sr	local	May 5, 8, 14				June 7		
Chestnut-sided warbler	tv, sr	c, unc	May 3, 7, 10	May 19, 30			yes	sr	
Bay-breasted warbler	tv	fc, ab at times	May 3, 8, 12	May 21, 30	Sept. 20	Oct. 10		tv	
Black-poll warbler	tv	c	May 12, 16, 20	May 19, 24, June 5				tv	
Blackburnian warbler	tv, sr	c, local	Apr. 26, May 3, 5	May 17, 31	Aug. 28, Sept. 11	Oct. 5		tv	
Yellow-throated warbler									
Black-throated green warbler	tv, sr	c, unc	Apr. 28, May 3	May 18, 24	Sept. 18	Oct. 10	yes	tv, sr	
Pine warbler	tv	fc, irreg	Apr. 20, May 3	May 14, 19					
Palm warbler	tv	fc	Apr. 23, May 2, 9	May 8, 14	Sept. 4, 13	Oct. 10		tv	
Yellow palm warbler									
Prairie warbler		rare	May 3, 9						
Ovenbird	sr	ab	Apr. 30, May 2, 3			Sept. 19, Oct. 4	June 5	sr	c
Water-thrush	tv	fc	Apr. 22, 29, May 5	May 9, 22				tv	
Grinnell water-thrush									
Louisiana water-thrush	tv, sr	unc, local	Apr. 20			Aug. 23			
Kentucky warbler		rare				23 Aug. '03			
Connecticut warbler	tv	unc			Sept. 11				
Mourning warbler	tv, sr	c, oc	May 3, 8, 12	May 17, 25			yes	tv	
Northern yellow-throat	sr	ab	May 3, 7, 12				yes	sr	
Yellow-breasted chat	sr	rare	May			Sept. 1			
Hooded warbler	tv, sr	fc, local	May 3, 7, 12			Sept. 13, 18	yes		
Wilson warbler	tv	fc, irreg	May 3, 12, 18	May 17, 27					
Canadian warbler	tv, sr	c, oc	May 3, 8, 12			Sept. 18	yes	tv	
American redstart	sr	ab	Apr. 30, May 2, 7			Oct. 2	yes	sr	
American pipit	tv	c, fall	May 4, 6	May 11, 21	Sept. 19, 25	Nov. 5		tv	
Mockingbird	av								
Catbird	sr	ab	Apr. 29, May 4, 6			Sept. 20, Oct. 10	yes	sr	
Brown thrasher	sr	fc	Apr. 17, 27, May 2			Sept. 25	yes		
Carolina wren		rare							
House wren	sr	fc	Apr. 30, May 2, 4			Sept. 22	yes	sr	
Winter wren	tv, res	c, oc	Mar. 28, Apr. 5, 13	May 10, 20			local	tv	
Short-billed marsh wren	sr	local					yes		
Long-billed marsh wren	sr	c	Apr. 27, May 14			Oct. 11	yes	sr	
Brown creeper	tv, wv	ab, unc	Apr. 6, 12	May 10, 25	Sept. 18			tv	
White-breasted nuthatch	res	c					yes	res	
Red-breasted nuthatch	tv, wv	fc, irreg	Mar. 9, Apr. 10	May 8, 30				tv	
Brown-headed nuthatch									
Tufted titmouse	av		20 May '02						
Chickadee	res	c					yes	res	
Carolina chickadee									
Hudsonian chickadee	av				20 Nov. '94				
Golden-crowned kinglet	tv, wv	ab, unc	Mar. 30, Apr. 5	May 3, 14, 21	Oct.			tv	
Ruby-crowned kinglet	tv	c	Apr. 5, 14, 19	May 10, 13, 17	Oct. 7	Sept. 3, Oct. 24		tv	
Blue-gray gnatcatcher	sr	rare	May 3, 7, 10				yes		
Townsend solitaire									
Wood thrush	sr	c	Apr. 25, 29, May 5			Sept. 30	yes	sr	
Wilson thrush	sr	c	Apr. 25, May 3, 6			Oct. 11	yes	sr	
Gray-cheeked thrush	tv	c	May 2, 9, 12	May 18, 30	Sept. 25			tv	
Bicknell thrush									
Olive-backed thrush	tv	c	May 3, 10, 12	May 22, 31	Sept. 3, 11	Sept. 18, 30		tv	
Hermit thrush	tv, sr	c, rare	Mar. 29, Apr. 11, 16	May 12, 17, 23			yes	tv	
American robin	sr, res	ab, oc	Feb. 24, Mar. 4, 13			Oct. 21	yes	sr	ab
Varied thrush									
Wood thrush									
Bluebird	sr	c	Feb. 24, Mar. 3, 15			Oct. 16, Nov. 10	2 broods	sr	c

	NEW YORK							NIAGARA		
lent ent	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south
	fc	May 1			Oct. 1	yes	r	fc	May 13
	once								
	c	May 1			Oct. 1	yes	r		May 13
		13 July '75							
	c	May 3, 5			Oct. 1	yes	sr	fc	May 9
	rare								
	unc	Apr. 18				yes	r	c	Apr. 12
	c, fc					yes	r	fc	Apr. 15, 22
	c	Apr. 20			Oct. 1	yes	sr	ab	Apr. 9, 20
	c, ab	Apr. 5			Sept. 1, Oct. 20	yes	sr	c	Apr.
	c	May 1			Oct. 1	yes	sr	ab	May 3
	fc, local	Apr. 25				yes	r		
	rare						av		22 Feb. '82
	c, fc					yes	res	c	
	unc			Nov. 2			wv	unc	
	rare			Sept. 3	Oct. 22		sr	fc	Apr. 18
	ab	May 3, 8			Oct.	yes	sr	c	May 9
	rare						tv	rare	May 17, 23
	c	Apr. 24, May 5				yes	r	c	
	c	Apr. 29, May 7			Sept. 20	yes	sr	fc	
	fc	Apr. 25	May 10	Sept. 20			tv	fc	May 3, 13
	c	May 7			Oct. 10	yes	sr	(?)	
	c, fc	Apr. 16, 20			Oct. 10	yes	tv	c	Apr. 18, May 5
	rare	May 10			Aug. 15	yes			
	c	May 2, 4, 10			Sept. 1	yes	av	once	
	unc	May 7			Aug. 15			rare	
	rare	May 15, 18				June 16			
	rare								
	fc	Apr. 29, May 2	May 11	Aug. 25	Sept. 22, 25		tv	c	May 7, 14
	rare				Oct. 9, 29		tv	rare	24 May '88
	unc	May 5		Sept. 8	Sept. 22		tv	oc	
	c, local	May 7			Oct. 10		tv	fc	
	rare	May 15					tv	rare	
	c	Apr. 19, May 5			Sept.	yes	r	ab	May 3
	c	Apr. 28, May 5, 10		Sept			tv	c	May 7, 9, 18
	ab, unc	Apr. 10, 24, May 1		Sept. 20	Oct. 30		tv	c	Apr. 25, May 7
	c	May 2, 5	May 13, 14	Aug. 25	Sept. 20		tv	c	May 6, 9, 16
	rare	5 May '86					sr	local	May 6, 14
	c	May 2, 5	May	Aug. 10	Oct. 10		sr	fc	May 7
	rare	May 9, 14	May 22, 24	July 26, Sept			tv	fc	May 16
	ab	May 20	May 30	Sept	Oct. 10, 19		tv	fc	May 9, 20
	fc	May 2, 8, 13	May 20	Sept			tv	fc	May 10
	c	Apr. 21, 25		Aug. 15			tv, sr	c, rare	May 5
	unc	Apr. 12, 16					tv	oc	May 8
	rare	Apr. 25			Sept. 2, 15		tv	oc	
	c	Apr. 10, 14		Sept. 25	Oct. 20				
	fc	Apr. 29, May 3, 8	May 15						
	ab	Apr. 22, May 1			Oct. 15	yes	sr	c	May 3
	c	Apr. 29, May 5		Sept. 1			tv	fc	May 1
	c	Apr. 15				yes			
	c	May 12				yes	tv	rare	
	fc, fall			Sept. 3, 12	Oct. 1, 3		tv	oc	
	rare	May 15	May 28				tv	rare	May 16
	ab	Apr. 29, May 5			Oct.	yes	sr	c	May 17, 22
	c	May 5, 7, 13			Sept	yes			
	c, local	May 1, 3, 5			Sept. 5	May 20			
	fc	May 4, 12	May 30	Aug. 15	Sept. 20, Oct. 4		tv	unc	
	c	May 10, 16	May 20, June 10	Aug. 5	Sept. 10		tv	fc	May 11, 17, 23
	c	May 5			Oct. 10	yes	sr	c	Apr. 29, May 12, 19
	c	Mar. 20, Apr. 15	May 5	Oct. 1	Nov		tv	fc	
	rare				Oct. 28, Nov. 21	yes	av	once	27 Dec. '06
	ab	Apr. 27, May 3			Oct. 20	yes	sr	c	
	c, oc	Apr. 20, 22			Oct. 16, 18	yes	sr	c	
	rare					yes			
	c	May 1			Oct. 15	yes	sr	c	
	fc		May 5	Oct. 1			tv	unc	
	rare, local				Oct. 8	yes			
	ab	May			Oct	yes	sr	c, local	
	fc		Apr. 12	Oct. 1			tv	c	Apr. 11
	c					yes	res	fc	
	irreg, rare			Aug. 7, Sept. 29, Oct. 15			tv	unc	
	rare								
	c					yes	res, wv	unc, c	
	c		May 5	Oct. 1			tv, wv	c, oc	
	fc	Apr. 10, 15	May 8	Sept. 25			tv	c	Apr.
	unc								
	ab	May 1			Oct. 10	yes	sr	c	Apr. 27, May 9, 15
	c	Apr. 28, May 1			Sept. 20	yes	sr	c	May 5, 13, 22
	c	May		Sept	Oct				
	rare								
	c	May 8, 12		Sept	Oct.		sr, tv	rare, c	May 11, 13, 18
	ab, oc	Apr. 1, 10	May 1	Oct. 1, 8	Nov. 1, 12		tv, sr	c, rare	Mar. 30, Apr. 20, 27
	ab, oc	Feb. 20			Dec	yes	sr, res	ab, oc	Mar. 3, 13, 20
				Dec. '51					
es	ab, c, oc	Mar. 1, 10				yes	sr	c	Feb. 28, Mar. 13, 21

SPECIES RECORDED	MONROE							MONTGOMERY		NEW YORK							NIAGARA		
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south
Rose-breasted grosbeak	tv, sr	c, unc	Apr. 24, May 2, 8							sr	fc	May 1			Oct. 1	yes	r	fc	May 13
Blue grosbeak							yes	sr		av	once				Oct. 1	yes	sr		May 13
Indigo bunting	sr		May 4, 8, 12							r	c	May 1							
Painted bunting										av		13 July '75							
Dickcissel																			
Lark bunting																			
Louisiana tanager			May 2, 4, 9				yes	sr		sr	c	May 3, 5			Oct. 1	yes	r		May 9
Scarlet tanager	sr, tv	unc								sv	rare								
Summer tanager							yes	sr		r	un	Apr. 18				yes	r		Apr. 12
Purple martin	sr	unc	Apr. 13, 17			Sept. 10	yes	r		tv, sr	fc				Oct. 1	yes	r	ab	Apr. 25, 29
Cliff swallow	sr	local	Apr. 26, 30			Sept. 10	yes	sr		r	c	Apr. 20			Sept. 1, Oct. 20	yes	r	c	Apr. 9, 20
Barn swallow	sr	ab	Apr. 12, 18, 20			Sept. 30	yes	r		sr, tv	c, ab	Apr. 5			Oct. 1	yes	r	ab	Apr.
Tree swallow	sr, tv	f, ab	Mar. 27, Apr. 3, 12			Aug. 20	yes	sr		sr	c	May 1				yes	r		May 3
Bank swallow	sr	ab	Apr. 10, 24, 27				yes			sr	c, local	Apr. 25							
Rough-winged swallow	sr	fc	Apr. 22, 26				yes			wv	rare					yes	r		22 Feb. '82
Bohemian waxwing	wv	rare								sr, res	fc							inc	
Cedar waxwing	sr, res	c, oc		Apr. 1, 12	Nov.		yes	sr	c	wv	unc			Nov. 2			r	fc	Apr. 18
Northern shrike	wv	unc					yes	sr		tv	rare			Sept. 3	Oct. 22		sr		May 9
Migrant shrike	sr	fc	Mar. 22, 24, 30			Sept. 20	yes	sr	c	sr	ab	May 3, 8			Oct.	yes	tv	rare	May 17, 23
Red-eyed vireo	sr	ab	May 3, 6, 10							tv	rare					yes	sr		
Philadelphia vireo	tv	fc	May 3, 10, 23	May 20, 24		Sept. 15	yes	sr	c	sr	c	Apr. 24, May 5			Sept. 20	yes	sr	fc	
Warbling vireo	sr	c	Apr. 30, May 3, 7				yes	sr		sr	c	Apr. 29, May 7					tv	fc	May 1, 13
Yellow-throated vireo	tv, sr	c, fc	Apr. 30, May 3, 10				yes	sr		tv	fc	Apr. 25	May 10	Sept. 20					
Blue-headed vireo	tv	fc	Apr. 24, 29, May 5					tv							Oct. 12	yes	r	c	
Plumbeous vireo							yes			sr	c	May 7			Oct. 10	yes	tv	c	Apr. 18, May 5
White-eyed vireo	sr	rare					yes	tv	c	tv, sr	c, fc	Apr. 16, 20							
Black and white warbler	tv, sr	ab, oc	Apr. 23, 26, 28	May 21											Aug. 15	yes	av	once	
Prothonotary warbler										sr	rare	May 10			Sept. 1	yes		rare	
Worm-eating warbler	av	rare	May 3, 25							sr	c	May 2, 4, 10			Aug. 15				
Blue winged warbler		rare	May 3, 13				yes			tv	unc	May 7				June 16			
Golden winged warbler	sr	unc	May 17, 25							sr	rare	May 18, 18					tv	c	May 7, 14
Lawrence warbler										sr	rare				Sept. 22, 25		tv	rare	24 May '88
Brewster warbler										tv	fc	Apr. 29, May 2	May 11	Aug. 25	Oct. 9, 29		tv	oc	
Nashville warbler	tv, sr	c, oc	Apr. 20, May 3, 5	May 21, 30	Aug. 7, 30	Oct. 11	yes	tv		tv	rare			Sept. 8	Sept. 22				
Orange-crowned warbler	tv	unc	May 6, 8, 14	May 17	Sept. 25	Oct. 12				tv	unc	May 5					tv	fc	
Tennessee warbler	tv	unc	May 12, 14	May 22, 26											Oct. 10		tv	rare	
Southern parula warbler								tv		tv, sr	c, local	May 7					r	ab	May 1
Northern parula warbler	tv	c	Apr. 26, May 1, 5	May 17, 27					c	tv	rare	May 15			Sept.	yes	tv	c	May 7, 9, 18
Cape May warbler	tv	unc	May 4, 7, 10	May 12, 14						sr	c	Apr. 19, May 5					tv	c	Apr. 25, May 7
Yellow warbler	sr	ab	Apr. 28, 30, May 4				May 25	sr	c	tv	c	Apr. 28, May 5, 10		Sept.	Oct. 30		tv		May 6, 9, 10
Black-throated blue warbler	tv, sr	ab, local	Apr. 26, 30, May 3	May 17, 24				tv		tv, wv	ab, unc	Apr. 10, 24, May 1		Sept. 20	Sept. 20		sr	local	May 6, 11
Myrtle warbler	tv	ab	Apr. 22, 26, 29	May 19, 21	Sept. 30	Oct. 20		tv		tv	c	May 2, 5	May 13, 14	Aug. 25			r	fc	May 7
Magnolia warbler	tv, sr	c, oc	May 3, 5, 12	May 20, 31							rare	5 May '80			Oct. 10		tv	fc	May 16
Cerulean warbler	sr	local	May 5, 8, 14				June 7	tv		tv	c	May 2, 5	May	Aug. 10			tv	fc	May 9, 20
Chestnut-sided warbler	tv, sr	c, unc	May 3, 7, 10	May 19, 30			yes	sr		tv	rare	May 9, 14	May 22, 24	July 26, Sept.	Oct. 10, 10		tv	fc	May 10
Bay-breasted warbler	tv	fc, ab at times	May 3, 8, 12	May 21, 30	Sept. 20	Oct. 10		tv		tv	ab	May 20	May 10	Sept.					
Black-poll warbler	tv	c	May 12, 16, 20	May 19, 24, June 5				tv		tv	fc	May 2, 8, 13	May 20	Sept.					
Blackburnian warbler	tv, sr	c, local	Apr. 26, May 3, 5	May 17, 31	Aug. 28, Sept. 11	Oct. 5		tv									tv, sr	c, rare	May 5
Yellow-throated warbler										tv	c	Apr. 21, 25		Aug. 15			tv	oc	May 8
Black-throated green warbler	tv, sr	c, unc	Apr. 28, May 3	May 18, 24	Sept. 18	Oct. 10	yes	tv, sr		tv	unc	Apr. 12, 16			Sept. 2, 15		tv	oc	
Pine warbler	tv	fc, irreg	Apr. 20, May 3	May 14, 19						tv	rare	Apr. 25			Oct. 20				
Palm warbler	tv	fc	Apr. 23, May 2, 9	May 8, 14	Sept. 4, 13	Oct. 10		tv		tv	c	Apr. 10, 14		Sept. 25					
Yellow palm warbler										tv	fc	Apr. 29, May 3, 8	May 15		Oct. 15	yes	sr	c	May 1
Prairie warbler		rare	May 3, 9							sr	ab	Apr. 22, May 1					tv	fc	May 1
Ovenbird	sr	ab	Apr. 30, May 2, 3			Sept. 19, Oct. 4	June 5	sr	c	tv	c	Apr. 29, May 5		Sept. 1					
Water-thrush	tv	fc	Apr. 22, 29, May 5	May 9, 22				tv								yes			
Grinnell water-thrush										sr	c	Apr. 15				yes	tv	rare	
Louisiana water thrush	tv, sr	inc, local	Apr 20			Aug. 23				sr	c	May 12		Sept. 3, 12	Oct. 1, 3		tv	c	May 16
Kentucky warbler		rare				23 Aug. '03				tv	fc, fall						tv	rare	May 17, 22
Connecticut warbler	tv	inc			Sept. 11					tv	rare	May 15	May 28		Oct.	yes	sr	c	
Mourning warbler	tv, sr	c, oc	May 3, 8, 12	May 17, 25			yes	tv		sr	ab	Apr. 29, May 5			Sept.	yes			
Northern yellow-throat	sr	ab	May 3, 7, 12				yes	sr		sr	c	May 5, 7, 13			Sept. 5	May 20		unc	
Yellow-breasted chat	sr	rare	May			Sept. 1	yes			sr	c, local	May 1, 3, 5			Sept. 20, Oct. 4		tv	fc	May 11, 17, 23
Hooded warbler	tv, sr	fc, local	May 3, 7, 12			Sept. 13, 18	yes			tv	fc	May 4, 12	May 30	Aug. 15	Sept. 10		tv	c	Apr. 29, May 12, 19
Wilson warbler	tv	fc, irreg	May 3, 12, 18	May 17, 27						tv	c	May 10, 16	May 20, June 10	Aug. 5	Oct. 10	yes	sr	fc	
Canadian warbler	tv, sr	c, oc	May 3, 8, 12			Sept 18	yes	tv		sr	c	May 5			Nov.		tv	once	27 Dec. '06
American redstart	sr	ab	Apr. 30, May 2, 7			Oct. 2	yes	sr		tv	c	Mar. 20, Apr. 15	May 5	Oct. 1	Oct. 28, Nov. 21	yes	av		
American pipit	tv	c, fall	May 4, 6	May 11, 21	Sept. 19, 25	Nov. 5		tv		sr	rare				Oct. 20	yes	sr	c	
Mocking-bird	av									sr	ab	Apr. 27, May 3			Oct. 10, 18	yes	sr	c	
Catbird	sr	ab	Apr. 29, May 4, 6			Sept. 20, Oct. 10	yes	sr		sr, wv	c, oc	Apr. 20, 22				yes			
Brown thrasher	sr	fc	Apr. 17, 27, May 2			Sept. 25	yes			res	rare				Oct. 15	yes	sr	c	
Carolina wren		rare								res	c	May 1		Oct. 1			tv	unc	
House wren	sr	fc	Apr. 30, May 2, 4			Sept. 22	yes	sr		wv	fc		May 5		Oct. 8	yes			
Winter wren	tv, res	c, oc	Mar. 28, Apr. 5, 13	May 10, 20			local	tv		sr	rare, local				Oct.	yes	sr	local	Apr. 11
Short-billed marsh wren	sr	local					yes			sr	ab	May					tv		
Long-billed marsh wren	sr	c	Apr. 27, May 14			Oct. 11	yes	sr		wv	fc		Apr. 12	Oct. 1		yes			
Brown creeper	tv, wv	ab, unc	Apr. 6, 12	May 10, 25	Sept. 18			tv		res	c						tv	unc	
White-breasted nuthatch	res	c					yes	res		tv, wv	irreg, rare			Aug. 7, Sept. 20, Oct. 15					
Red-breasted nuthatch	tv, wv	fc, irreg	Mar. 9, Apr. 10	May 8, 30				tv									res, wv	unc	
Brown-headed nuthatch											rare					yes			
Tufted titmouse	av		20 May '02							res	c								
Chickadee	res	c					yes		res								tv, wv	c, oc	
Carolina chickadee																	tv		Apr.
Hudsonian chickadee	av				20 Nov. '04					wv	c		May 5	Oct. 1					
Golden-crowned kinglet	tv, wv	ab, unc	Mar. 10, Apr. 5	May 3, 14, 21	Oct.			tv		tv	fc	Apr. 10, 15	May 8	Sept. 25					
Ruby-crowned kinglet	tv		Apr. 5, 14, 19	May 10, 13, 17	Oct. 7	Sept. 3, Oct. 24		tv		sv	unc						er		Apr. 27, May 9, 15
Blue-gray gnatcatcher	sr	rare	May 3, 7, 10				yes								Oct. 15	yes	sr		May 5, 11, 22
Townsend solitaire										sr	ab	May 1			Sept. 22	yes			
Wood thrush	sr	c	Apr. 25, 29, May 5			Sept. 10	yes	sr		sr	c	Apr. 28, May 1		Sept.	Oct.				
Wilson thrush	sr	c	Apr. 25, May 3, 6			Oct. 11	yes	sr		tv	c	May					sr, tv	rare c	May 11, 13, 18
Gray-cheeked thrush	tv		May 2, 9, 12	May 18, 30	Sept. 25			tv		tv	rare			Sept.	Oct.		tv, sr	rare	Mar. 30, Apr. 20, 27
Bicknell thrush										tv	c	May 8, 12			Nov. 1, 12		sr, res	ab, oc	Mar. 3, 11, 29
Olive-backed thrush	tv	c	May 1, 10, 12	May 22, 31	Sept. 1, 11	Sept. 18, 30		tv		tv, wv	ab, oc	Apr. 1, 10	May 1	Oct. 1, 8	Dec.	yes			
Hermit thrush	tv, sr	c, rare	Mar. 20, Apr. 11, 16	May 12, 17, 23			yes	tv		sr, res	ab, oc	Feb. 20		Dec. '81					
American robin	sr, res	ab, oc	Feb. 24, Mar. 4, 13			Oct. 21	yes	sr	ab	av						yes	sr	c	Feb. 28, Mar. 11, 21
Varied thrush																			
Wheatear																			
Bluebird	sr	c	Feb. 24, Mar. 3, 15			Oct. 16, Nov. 10	2 broods	sr	c	tv, sr, res	ab, c, oc	Mar. 1, 10							

SPECIES RECORDED	NIAGARA (*continued*)			ONEIDA					
	Leaves for north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Returns from north	Departs for south	Breed
Rose-breasted grosbeak			yes	sr	fc	May 4, 12			yes
Blue grosbeak									
Indigo bunting			yes	sr	c	May 2, 10			yes
Painted bunting									
Dickcissel									
Lark bunting									
Louisiana tanager									
Scarlet tanager			yes	sr	fc	May 4, 12			yes
Summer tanager									
Purple martin			yes	sr	oc				yes
Cliff swallow			yes	sr	c	Apr. 27			yes
Barn swallow			yes	sr	ab	Apr. 24, 26			yes
Tree swallow			yes	sr	c	Apr.			yes
Bank swallow			yes	sr	local	Apr. 27			yes
Rough-winged swallow			yes	sr	fc				yes
Bohemian waxwing				wv	rare				
Cedar waxwing			yes	sr, res	c, fc				yes
Northern shrike				wv	unc				
Migrant shrike			yes	sr	unc	Mar. 18, Apr. 7		Sept. 24	yes
Red-eyed vireo			yes	sr	ab	May 3, 7			yes
Philadelphia vireo				tv	rare		Sept. 14		
Warbling vireo			yes	sr	ab	May 2, 3			yes
Yellow-throated vireo			yes	sr	fc	May 5			yes
Blue-headed vireo				tv, sr	rare, local				yes
Plumbeous vireo									
White-eyed vireo			yes						
Black and white warbler	May 14			tv, sr	c, fc	Apr. 19, May 3			yes
Prothonotary warbler									
Worm-eating warbler									
Blue-winged warbler		21 July '89							
Golden-winged warbler					rare				
Lawrence warbler									
Brewster warbler									
Nashville warbler	May 18			tv, sr	unc, fc	May 3, 8			yes
Orange-crowned warbler				tv	rare			Sept. 16	
Tennessee warbler		Oct. 31		tv	rare		Sept. 30		
Southern parula warbler									
Northern parula warbler				tv, sr	ab, local	May 3, 6, 12			yes
Cape May warbler				tv	rare	May 11			
Yellow warbler			yes	sr	ab	May 3, 6, 9			yes
Black-throated blue warbler			May 30	tv, sr	c, local	May 5, 6, 8			yes
Myrtle warbler	May 18			tv	ab	Apr. 28, May 1, 3			
Magnolia warbler				tv, sr	fc, local				yes
Cerulean warbler			May 30, June 8, 23	sr	local	May 9			yes
Chestnut-sided warbler				sr	c	May 5, 6, 12			yes
Bay-breasted warbler				tv	unc	May 15	Aug. 6		
Black-poll warbler				tv	ab, irreg	May 26			
Blackburnian warbler				tv, sr	c, local	Apr. 27, May 3, 12			July
Yellow-throated warbler									
Black-throated green warbler			yes	tv, sr	c, local	Apr. 29, May 2, 12			yes
Pine warbler				sr	unc, local				11 June '89
Palm warbler				tv	rare	May 3, 8, 9		Oct. 5	
Yellow palm warbler									
Prairie warbler									
Ovenbird			yes	sr	ab	Apr. 13, May 11, 26			yes
Water-thrush				sr	fc	May 4			yes
Grinnell water-thrush									
Louisiana water-thrush				sr	local	May 9			yes
Kentucky warbler									
Connecticut warbler				tv	rare		Sept. 8	Sept. 18	
Mourning warbler		Sept	June 13	sr	rare	May 14			yes
Northern yellow-throat			yes	sr	c	May 3, 8, 17			yes
Yellow-breasted chat				sr	rare				June 6
Hooded warbler				sr	rare				June 4, 15
Wilson warbler				tv	rare				
Canadian warbler				tv, sr	c, local	May 10, 14			yes
American redstart			yes	sr	c	May 10			yes
American pipit				tv	ab, irreg				
Mockingbird									
Catbird			yes	sr	ab	May 8, 10			yes
Brown thrasher			yes	sr	c, local				yes
Carolina wren									
House wren			yes	sr	fc	Apr. 25			yes
Winter wren				sr	fc, local	Apr. 18			June 28
Short-billed marsh wren									
Long-billed marsh wren			yes	tv, sr	unc, rare				yes
Brown creeper				tv, sr	c, local	Apr. 17			May 2, June
White-breasted nuthatch			yes	res	c				yes
Red-breasted nuthatch				tv, sr	c, local	Apr. 28			Apr. 30, Ma
Brown-headed nuthatch									
Tufted titmouse									
Chickadee			yes	res	ab				yes
Carolina chickadee									
Hudsonian chickadee				wv	oc			Dec. 25, Jan. 18	
Golden-crowned kinglet				tv, res	ab, oc				June 28
Ruby-crowned kinglet				tv	c	Apr. 19, 25			
Blue-gray gnatcatcher									
Townsend solitaire									
Wood thrush			yes	sr	fc				yes
Wilson thrush			yes	sr	ab	May 5, 8			yes
Gray-cheeked thrush				tv					
Bicknell thrush									
Olive-backed thrush			yes	tv, sr	c, local				yes
Hermit thrush			yes	tv, sr	c, local	Apr. 16, 25			yes
American robin			yes	sr	ab	Mar. 11, 21			yes
Varied thrush									
Wheatear									
Bluebird			yes	sr	ab	Mar. 11, 21, 26			yes

ONONDAGA							ONTARIO			
nt nt	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north
	unc.						tv, sr.	fc, unc	May 4, 12	
	c					yes	sr.	c	May 8, 12	
	once, 1883									
	c					yes	sr.	fc	May 2, 11, 12	
	fc					yes	sr.	fc	Apr. 13, 17, 23	
	ab.					yes	sr.	unc.	Apr. 25, May 5	
	ab.					yes	sr.	ab.	Apr. 12, 18, 20	
	c					yes	tv, sr.	fc, unc	Mar. 31, Apr. 1, 11	
	ab.					yes	sr.	c	Apr. 16, 27, 30	
	rare					yes	sr.	fc	Apr. 22, 25	
	rare			10 Feb. '99			wv	rare		
	ab, c					yes, July 23	sr, res.	c, oc		
	fc						wv	unc		Mar. 10, Apr. 11
	fc					yes	sr.	fc	Mar. 21, 25	
	c					yes, June 11	sr.	ab.	May 4, 12, 13	
	unc.						tv	unc.	May 9	
	c					yes	sr.	c	Apr. 29, May 3, 5	
	fc, oc					yes	tv, sr.	c, fc	Apr. 28, 30, May 7	
	fc						tv	c	Apr. 25, 27, May 4	May 18
	rare									
	c, oc	Apr. 30, May 2, 8	May 9, 15			yes	tv, sr.	c, unc	Apr. 20, 27, May 5	May 15, 21
	rare							rare	May 13	
	rare	May					sr.	rare	May 10, 17	
	c	May 4	May 8				tv	c	Apr. 29, May 2, 5	May 25, 31
	rare				Oct. 2		tv	rare	May 14	
							tv	rare	May 9, 17	May 22
	c, local					yes	tv, sr.	c, oc	May 3, 5, 9	May 22, June 5
	unc.			Oct. 2			tv	rare		
	ab.					yes	sr.	ab.	Apr. 29, May 2, 5	
	c, oc	May 4			Sept. 18	yes	tv, sr.	c, local	Apr. 29, May 3, 12	May 22, June 3
	ab.						tv	ab.	Apr. 21, 26, May 1	May 15, 20
	fc	May 7			Sept. 4		tv, sr.	c, local	May 3, 9, 12	May 25, June 5
	local					yes	sr.	local	May 4, 14	
	c	May 8				yes	tv, sr.	c, unc	May 3, 6, 12	May 25
	fc	May 16					tv	c	May 8, 12, 14	May 22, June 3
	fc, irreg						tv	c	May 12, 14, 20	May 25, June 8
	c				Sept. 4		tv, sr.	c, rare	Apr. 30, May 3, 10	May 25, June 5
	c	May 2			Sept. 18, Oct. 2	yes	tv, sr.	c, fc	May 1, 3, 9	
	rare						sr.	local	Apr. 28	
							tv	unc.	Apr. 20, 26	May 13
	rare									
	c	May 2, 6, 21				yes	sr.	ab.	Apr. 30, May 3, 5	
	fc, oc	May 21				yes	tv, sr.	fc, local	Apr. 25, 30	
	fc					yes	sr.	c, local	Apr. 15, 26	
							tv	rare	May 29 (?)	
	fc	May 7				yes	tv, sr.	fc, unc	May 7, 8, 12	
	fc	May 5, 7, 21				yes	sr.	c	May 3, 4, 10	
							sr.	local		
	oc, local					yes	tv	rare	May 7, 12	
	unc.						tv	unc.	May 9, 12, 18	May 22, 30
	c, oc	May 21				yes	tv, sr.	c, fc	May 8, 9, 13	
	c	May 2, 4, 21				yes, June 5	sr.	c	May 2, 4, 10	
	c, irreg						tv	c, fall	Apr. 20, May 6	May 12, 21
	c					yes	sr.	ab.	May 3, 5, 10	
	fc					yes	sr.	fc, local	Apr. 20, 28, May 4	
	once						av	rare	11-19 Mar. '04	
	unc.					yes	sr.	unc.	May 1, 3, 8	
	c, rare					yes	tv, wv	c, rare	Apr. 5, 12	May 5, 17
	rare					yes	(?)			
	c					yes	sr.	c	Apr. 27, May 14	
	ab.						tv, res.	c, rare	Apr. 1, 10	May 10, 16
	c					yes	res.	c		
	fc						tv, wv	fc, rare	Mar. 20, Apr. 10, May 6	May 23
	c					yes, May 12	res.	c		
	ab.						tv, wv	ab, fc	Mar. 25, Apr. 3	May 5, 14
	c						tv	c	Apr. 14, 21, 24	May 10, 20
							sr.	rare	Apr. 25, May, June 3	
	c					yes	sr.	c	May 1, 3, 10	
	c					yes, June 7	sr.	c	Apr. 29, May 3, 8	
	rare						tv	fc	May 3, 15, 24	May 30
	fc						tv	c	May 3, 10, 12	June 1
	c						tv, sr.	c, rare	Apr. 8, 12, 22	May 8, 17
	ab.	Feb. 27, Mar. 9, 20				yes	sr, res.	ab, rare	Feb. 24, Mar. 4, 12	
	fc					yes, May 27	sr.	c	Feb. 24, Mar. 4, 22	

SPECIES RECORDED	NIAGARA (*continued*)			ONEIDA						ONONDAGA							ONTARIO			
	Leaves for north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north
Rose-breasted grosbeak			yes	sr	fc	May 4, 12			yes	sr	unc						tv, sr	fc, unc	May 4, 12	
Blue grosbeak																				
Indigo bunting			yes	sr	c	May 2, 10			yes	sr	c					yes	sr	c	May 8, 12	
Painted bunting																				
Dickcissel										av	once, 1883									
Lark bunting																				
Louisiana tanager																				
Scarlet tanager			yes	sr	fc	May 4, 12			yes	sr	c					yes	sr	fc	May 2, 11, 12	
Summer tanager																				
Purple martin			yes	sr	oc				yes	sr	fc					yes	sr	fc	Apr. 13, 17, 23	
Cliff swallow			yes	sr	c	Apr. 27			yes	sr	ab					yes	sr	unc	Apr. 25, May 5	
Barn swallow			yes	sr	ab	Apr. 24, 26			yes	sr	ab					yes	sr	ab	Apr. 12, 18, 20	
Tree swallow			yes	sr	c	Apr.			yes	sr	c					yes	tv, sr	fc, unc	Mar. 31, Apr. 1, 11	
Bank swallow			yes	sr	local	Apr. 27			yes	sr	ab					yes	sr	c	Apr. 16, 27, 30	
Rough-winged swallow			yes	sr	fc				yes	sr	rare					yes	sr	fc	Apr. 22, 25	
Bohemian waxwing				wv	rare					wv	rare			10 Feb. '99			wv	rare		
Cedar waxwing			yes	sr, res	c, fc				yes	sr, res	ab, c					yes, July 23	sr, res	c, oc		
Northern shrike				wv	unc					wv	fc						wv	unc		Mar. 10, Apr. 11
Migrant shrike			yes	sr	unc	Mar. 18, Apr. 7		Sept 24	yes	sr	fc					yes	sr	fc	Mar. 21, 25	
Red-eyed vireo			yes	sr	ab	May 3, 7			yes	sr	c					yes, June 11	sr	ab	May 4, 12, 13	
Philadelphia vireo				tv	rare		Sept. 14			tv	unc						tv	unc	May 9	
Warbling vireo			yes	sr	ab	May 2, 3			yes	sr	c					yes	sr	c	Apr. 20, May 3, 5	
Yellow-throated vireo			yes	sr	fc	May 5			yes	tv, sr	fc, oc					yes	tv, sr	c, fc	Apr. 28, 30, May 7	
Blue-headed vireo				tv, sr	rare, local				yes	tv	fc						tv	c	Apr. 25, 27, May 4	May 18
Plumbeous vireo																				
White-eyed vireo			yes								rare									
Black and white warbler	May 14			tv, sr	c, fc	Apr. 19, May 3			yes	tv, sr	c, oc	Apr. 30, May 2, 8	May 9, 15			yes	tv, sr	c, unc	Apr. 20, 27, May 5	May 15, 21
Prothonotary warbler											rare									
Worm-eating warbler																		rare	May 13	
Blue-winged warbler		21 July '89			rare						rare	May					sr	rare	May 10, 17	
Golden-winged warbler																				
Lawrence warbler																				
Brewster warbler																				
Nashville warbler	May 18			tv, sr	unc, fc	May 3, 8			yes	tv	c	May 4	May 8				tv	c	Apr. 29, May 2, 5	May 25, 31
Orange-crowned warbler				tv	rare			Sept. 16		tv	rare				Oct. 2		tv	rare	May 14	
Tennessee warbler		Oct. 31		tv	rare		Sept 30										tv	rare	May 9, 17	May 22
Southern parula warbler																				
Northern parula warbler				tv, sr	ab, local	May 3, 6, 12			yes	tv, sr	c, local					yes	tv, sr	c, oc	May 3, 5, 9	May 22, June 5
Cape May warbler				tv	rare	May 11				tv	unc			Oct. 2			tv	rare		
Yellow warbler			yes	sr	ab	May 3, 6, 9			yes	sr	ab					yes	sr	ab	Apr. 29, May 2, 5	
Black-throated blue warbler			May 30	tv, sr	c, local	May 5, 6, 8			yes	tv, sr	c, oc	May 4			Sept. 18	yes	tv, sr	c, local	Apr. 29, May 3, 12	May 22, June 3
Myrtle warbler	May 18			tv	ab	Apr. 28, May 1, 3				tv	ab						tv	ab	Apr. 21, 26, May 1	May 15, 20
Magnolia warbler				tv, sr	fc, local				yes	tv	fc	May 7			Sept. 4		tv, sr	c, local	May 3, 9, 12	May 25, June 5
Cerulean warbler			May 30, June 8, 23	sr	local	May 9			yes	sr	local					yes	sr	local	May 4, 14	
Chestnut-sided warbler				sr	c	May 5, 6, 12			yes	sr	c	May 8				yes	tv, sr	c, unc	May 3, 6, 12	May 25
Bay-breasted warbler				tv	unc	May 15	Aug. 6			tv	fc	May 16					tv	c	May 8, 12, 14	May 22, June 3
Black-poll warbler				tv	ab, irreg	May 26				tv	fc, irreg						tv	c	May 12, 14, 20	May 25, June 8
Blackburnian warbler				tv, sr	c, local	Apr. 27, May 3, 12			July	tv	c				Sept. 4		tv, sr	c, rare	Apr. 30, May 3, 10	May 25, June 5
Yellow-throated warbler																				
Black-throated green warbler			yes	tv, sr	c, local	Apr. 29, May 2, 12			yes	tv, sr	c	May 2			Sept. 18, Oct. 2	yes	tv, sr	c, fc	May 1, 3, 9	
Pine warbler				sr	unc, local				11 June '89	tv	rare						sr	local	Apr. 28	
Palm warbler				tv	rare	May 3, 8, 9		Oct. 5									tv	unc	Apr. 20, 26	May 13
Yellow palm warbler										tv	rare									
Prairie warbler																				
Ovenbird			yes	sr	ab	Apr. 13, May 11, 26			yes	sr	c	May 2, 6, 21				yes	sr	ab	Apr. 30, May 3, 5	
Water-thrush				sr	fc	May 4			yes	tv, sr	fc, oc	May 21				yes	tv, sr	fc, local	Apr. 25, 30	
Grinnell water-thrush																				
Louisiana water-thrush				sr	local	May 9			yes	sr	fc					yes	sr	c, local	Apr. 15, 20	
Kentucky warbler																				
Connecticut warbler				tv	rare		Sept. 8	Sept. 18									tv	rare	May 29 (?)	
Mourning warbler		Sept	June 13	sr	rare	May 14			yes	sr	fc	May 7				y 5	tv, sr	fc, unc	May 7, 8, 12	
Northern yellow-throat			yes	sr	c	May 3, 8, 17			yes	sr	fc	May 5, 7, 21				yes	sr	c	May 3, 4, 12	
Yellow-breasted chat				sr	rare				June 6								sr	local		
Hooded warbler				sr	rare				June 4, 15	sr	oc, local					yes	tv	rare	May 7, 12	
Wilson warbler				tv	rare					tv	unc						tv	unc	May 9, 12, 18	May 22, 30
Canadian warbler				tv, sr	c, local	May 10, 14			yes	tv, sr	c, oc	May 21				yes, June 5	tv, sr	c, fc	May 8, 9, 13	
American redstart			yes	sr	c	May 10			yes	sr	c	May 2, 4, 21					sr	c	May 2, 4, 10	
American pipit				tv	ab, irreg					tv	c, irreg						tv	c, fall	Apr. 20, May 6	May 12, 21
Mockingbird																				
Catbird			yes	sr	ab	May 8, 10			yes	sr	c					yes	sr	ab	May 3, 5, 10	
Brown thrasher			yes	sr	c, local				yes	sr	fc					yes	sr	fc, local	Apr. 20, 28, May 4	
Carolina wren										av	once						av	rare	11-19 Mar '04	
House wren			yes	sr	fc	Apr. 25			yes	sr	unc					yes	sr	unc	May 1, 3, 8	
Winter wren				sr	fc, local	Apr. 18			June 28	tv, sr	c, rare					yes	tv, wv	c, rare	Apr. 5, 12	May 5, 17
Short-billed marsh wren										sr	rare					yes	(?)			
Long-billed marsh wren			yes	tv, sr	unc, rare				yes	sr	c					yes	sr	c	Apr 27, May 14	
Brown creeper				tv, sr	c, local	Apr. 17			May 2, June 15	tv	ab					yes	tv, res	c, rare	Apr. 1, 10	May 10, 10
White-breasted nuthatch			yes	res	c				yes	res	c						res	c		
Red breasted nuthatch				tv, sr	c, local	Apr. 28			Apr. 30, May 8	tv	fc					yes	tv, wv	fc, rare	Mar. 20, Apr. 10, May 6	May 23
Brown-headed nuthatch																				
Tufted titmouse																				
Chickadee			yes	res	ab				yes	res	c					yes, May 12	res	c		
Carolina chickadee																				
Hudsonian chickadee				wv	oc												tv, wv	ab, fc	Mar. 25, Apr. 3	May 5, 14
Golden-crowned kinglet				tv, res	ab, oc			Dec. 25, Jan. 18		tv	ab						tv	c	Apr. 14, 21, 24	May 10, 20
Ruby-crowned kinglet				tv	c	Apr. 19, 25			June 28	tv	c						sr	rare	Apr. 25, May, June 3	
Blue-gray gnatcatcher																				
Townsend solitaire																			May 1, 3, 10	
Wood thrush			yes	sr	fc				yes	sr	c					yes	sr	c	Apr. 29, May 3, 8	
Wilson thrush			yes	sr	ab	May 5, 8			yes	sr	c					yes, June 7	sr	c	May 3, 15, 24	May 30
Gray-cheeked thrush				tv					yes	tv	rare						tv	fc		
Bicknell thrush																			May 3, 10, 12	June 1
Olive-backed thrush			yes	tv, sr	c, local				yes	tv	fc						tv, sr	c, rare	Apr. 8, 12, 22	May 8, 17
Hermit thrush			yes	tv, sr	c, local	Apr. 16, 25			yes	tv	c					yes	sr, res	ab, rare	Feb. 24, Mar. 4, 12	
American robin			yes	sr	ab	Mar. 11, 21			yes	sr	ab	Feb. 27, Mar. 9, 20								
Varied thrush																				
Wheatear																yes, May 27	sr	c	Feb. 24, Mar. 4, 22	
Bluebird			yes	sr	ab	Mar. 11, 21, 26			yes	sr	fc									

SPECIES RECORDED	ONTARIO (*continued*)			ORANGE					
	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Departs for south	Bre
Rose-breasted grosbeak		Sept. 25	May 25, June 10	sr	c	May 6, 8			yes
Blue grosbeak									
Indigo bunting		Oct. 5, 13	May 30, June 15	sr	c	May 8, 12			yes
Painted bunting									
Dickcissel									
Lark bunting									
Louisiana tanager				av	once			21 Dec. '81	
Scarlet tanager		Sept. 20, Oct. 12	May 25, June 15	sr	c	May 7			yes
Summer tanager									
Purple martin		Aug. 18, 25, Sept. 5	May 10, 30	sr	c				yes
Cliff swallow		Sept. 1	May 30	sr	c	Apr. 30			yes
Barn swallow		Sept. 9, 16	May 10, 30	sr	c	Apr. 26			yes
Tree swallow		Oct. 5, 25	May 15, 30	tv, sr	c, unc				yes
Bank swallow			May 15, June 10	sr	c	May 5			yes
Rough-winged swallow		Aug	May 30, June 15						
Bohemian waxwing	22 Feb. '04			wv	rare				
Cedar waxwing			June 10, 30	res	c				yes
Northern shrike	Nov. 1, 29			wv	rare				
Migrant shrike		Oct. 15	May 1, 18		unc				
Red-eyed vireo		Sept. 26, Oct. 5	May 18, June 6	sr	c	May 6			yes
Philadelphia vireo	Sept. 18								
Warbling vireo		Sept. 14, 22	May 20, June 10	sr	c	Apr. 29, May 4			yes
Yellow-throated vireo		Sept. 22	May 30	sr	c	May 3			yes
Blue-headed vireo	Sept. 6, 22	Sept. 26, Oct. 10		tv	rare				
Plumbeous vireo									
White-eyed vireo				sr					
Black and white warbler	Aug. 20, 30	Sept. 18, 25	yes	tv	c	Apr. 28	May 15		
Prothonotary warbler									
Worm-eating warbler				sr	fc	May 8, 11, 15			yes
Blue-winged warbler				sr	fc	May 16			yes
Golden-winged warbler			yes	sr		May 21			
Lawrence warbler								July 7	
Brewster warbler									
Nashville warbler	Sept. 18, 23	Oct. 7		tv					
Orange-crowned warbler	Sept. 20					May 13			
Tennessee warbler				tv	rare				
Southern parula warbler									
Northern parula warbler	Sept. 14, 19	Oct. 3, 12	yes	tv		May 16			
Cape May warbler									
Yellow warbler		Sept. 25, Oct. 3	May 15, 30	sr	c	Apr. 29, May 6			yes
Black-throated blue warbler	Aug. 30	Oct. 2, 12	yes	tv	c	Apr. 29, May 3, 9	May 15		
Myrtle warbler	Sept. 8, 15	Oct. 25		tv, wv	c, oc		May 28		
Magnolia warbler	Aug. 30, Sept. 10	Sept. 20, 28	yes	tv	c	Apr. 29, May 3	May 23		
Cerulean warbler			yes	tv	rare	May 10, 11	May 15, 17		
Chestnut-sided warbler	Sept. 1	Oct. 1, 14	yes	sr	c	May 4, 9, 11			yes
Bay-breasted warbler	Sept. 5, 15	Sept. 25		tv	fc	May 20	June 4		
Black-poll warbler	Sept. 19, 28	Oct. 20, Nov. 22		tv	c	May 20	June 1		
Blackburnian warbler	Aug. 30, Sept. 12	Oct. 3, 13	yes	tv	fc	Apr. 29, May 3	May 15		
Yellow-throated warbler									
Black-throated green warbler	Aug. 30	Oct. 4, 25	yes	sr		Apr. 30, May 9			yes
Pine warbler		Oct. 7	yes	sr	unc	May 10			
Palm warbler	Oct. 7	Oct. 16							
Yellow palm warbler				tv					
Prairie warbler									
Ovenbird		Sept. 18	May 25, June 12	sr	c	May 3		Sept. 18	yes
Water-thrush		Oct. 1	yes	tv	fc	Apr. 22		Sept. 19	
Grinnell water-thrush									
Louisiana water-thrush		Aug. 20	yes	sr					yes
Kentucky warbler				sr		May 13, 23			
Connecticut warbler									
Mourning warbler		Sept. 20	June 10, 26	tv	fc	May 1, 10			
Northern yellow-throat		Oct. 10	yes	sr	c	Apr. 29, May 8		Sept. 15	yes
Yellow-breasted chat		Sept. 1		sr	unc	May 6, 13			yes
Hooded warbler		Aug. 30		sr	c				yes
Wilson warbler		Sept. 25							
Canadian warbler		Aug. 30, Sept. 12	yes	tv	c	Apr. 27, May 10	May 15		
American redstart		Sept. 25, Oct. 3	May 25, June 10	sr	c	Apr. 29, May 3		Sept. 19	yes
American pipit	Sept. 20, 25	Oct. 27, Nov. 14							
Mockingbird									
Catbird		Sept. 25, Oct. 10	May 20, June 15	sr	c	May 1, 5			yes
Brown thrasher		Sept. 30	May 25	sr	c	Apr. 28			yes
Carolina wren									
House wren		Sept. 20	yes	sr	c	Apr. 30			yes
Winter wren	Sept. 9, 25	Oct. 20, 30		wv		May	Oct.		
Short-billed marsh wren									
Long-billed marsh wren		Oct. 25	June 1, 15	sr	c	Apr. 30			yes
Brown creeper	Sept. 20, 25	Oct. 10, 25	local	wv	unc				
White-breasted nuthatch			May 10	res	c				yes
Red-breasted nuthatch	Sept. 24, Oct. 10			wv	irreg				
Brown-headed nuthatch									
Tufted titmouse					rare				
Chickadee			May 15	res	c				yes
Carolina chickadee									
Hudsonian chickadee									
Golden-crowned kinglet	Sept. 20, 24	Oct. 25, Nov. 15		tv	c				
Ruby-crowned kinglet	Sept. 20, 26	Oct. 10, 24		tv	c	Apr. 10, 22			
Blue-gray gnatcatcher									
Townsend solitaire									
Wood thrush		Sept. 16, Oct. 15	May 25, June 10	sr	c	Apr. 27, May 5			yes
Wilson thrush		Sept. 20, Oct. 13	May 20, 30	sr	c	Apr. 30, May 8			yes
Gray-cheeked thrush	Sept. 15	Oct. 12							
Bicknell thrush									
Olive-backed thrush	Sept. 6, 18	Oct. 5, 16		tv					
Hermit thrush	Sept. 25, 30	Oct. 20, 28		tv, wv	c, rare	Mar. 25, Apr. 9	May 5		
American robin		Nov. 10, 20	Apr. 15, May 5	sr, res	ab,oc	Mar. 1			yes
Varied thrush									
Wheatear									
Bluebird		Oct. 23, Nov. 3	Apr. 15, May 10	sr, res	c, oc	Mar. 4			yes

ORLEANS				OSWEGO				OTSEGO			
Common or rare	Arrives from south	Leaves for north	Breeds	Resident or transient	Common or rare	Arrives from south	Breeds	Resident or transient	Common or rare	Arrives from south	Breeds
c	May 7		yes	sr	fc	May 13	yes	sr			yes
fc	May 16		yes	sr	c	May 7, 10	yes	sr			yes
fc	May 7, 10		yes	sr	c	May 4, 13	yes	sr			yes
	Apr. 23		yes	sr	fc		yes				
c	Apr. 23		yes	sr	ab		yes, June 4	sr			yes
c	Apr. 22, 24		yes	sr	ab	Apr. 23, 27	May 30	sr	c		yes
			yes	sr	c	Apr. 19	yes	sr			yes
c			yes	sr	ab		June 1	sr			yes
				sr	unc		yes				
				wv	rare	31 Jan. '80, Feb. 2					
c			yes	sr	c		yes, June 28	sr	c		yes
unc				wv	unc			wv			
fc			yes	sr	c	Mar. 20, 26	Apr. 26, May 20	sr			
c	May 3		yes	sr	c	May 7	yes	sr	c		yes
c	Apr. 29, May 2		yes	sr	c		yes	sr	c		yes
fc	May 10		yes	sr	fc		yes	sr			
unc	May 10			tv	unc						
rare				sr	fc		yes (?)				
fc, oc	May 1, 3			tv, sr	ab, fc		yes	sr			
rare			yes								
fc				tv	c			tv			
unc											
fc				tv, sr	ab, fc	Apr. 28, May 5	yes	tv			
rare				tv	rare						
ab	Apr. 30, May 5		yes	sr	ab	May 3	May 22	sr	c		yes
c, oc	May 8		yes	tv, sr	ab, oc	Apr. 29	yes	sr			
c				tv	ab	Apr. 26, Oct. 1		tv			
fc	May 8			tv, sr	c, fc		yes	sr	c	May 9	
local	May 4, 9		yes								
fc	May 7		yes	tv, sr	c, fc		yes	sr			
unc	May 9			tv	c	May 19					
fc	May 20			tv	c	May 16, 20					
c	May 8			tv, sr	c, rare	May 10		tv	c	May 9, 25	
c	May 8			tv	fc	May 10		sr			yes
rare	May 6			tv	oc						
rare	May 12			tv	oc						
				sr	rare		June 2				
c			yes	sr	ab	May 5	June 7	sr	c		yes
fc, oc	Apr. 24, 30			sr	oc	May 10					
unc			yes	tv		May 10					
unc			yes								
c	May 7		yes	sr	c	May 8, 10, 14	yes	sr			
rare	May 8, 30							sr	rare		
local			yes	sr	oc						
unc		May 28		tv	unc						
c				tv, sr	c, oc			tv			
c	May 7		yes	sr	ab	May 7, 16	May 25	sr	c		
c, fall				tv	c						
				av							
ab	May 9		yes	sr	c		May 25	sr	c		
local			yes	sr	c	May 3	May 17	sr			
c	Apr. 23, May 8		yes	sr	c	May 1	yes, June 18	sr			
fc				tv	c			tv			
rare, local			May 30, June 1		rare						
c			yes	sr	c		June 10	sr	local		
c, oc			May	tv, sr	c, local		yes	tv			
c			yes	res	c		yes	res			yes
unc		May 9		tv	fc			tv			
	17 Mar. '89										
c			yes	res	ab		yes, June 12	res	c		yes
c, oc	Mar. 25	May 10		tv, wv	ab, rare			tv	c		
c	Apr. 20	May 12		tv	ab			tv			
c	May 7		yes	sr	ab	May 12	yes, June 6	sr			
c	Apr. 30, May 7		yes	sr	c	May 5, 12	yes	sr			
				tv	unc						
c				tv	c			tv			
c				tv, sr	c, unc			tv			
ab	Mar. 5, 23		yes	sr, res	ab, rare	Mar. 10, 16, 21	yes, May 3	sr	c		yes
c	Mar. 15		yes	sr	ab	Mar. 23	Apr. 28, May 15	sr	c		yes

SPECIES RECORDED	ONTARIO (continued)			ORANGE						ORLEANS					OSWEGO				OTSEGO			
	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Breeds	Resident or transient	Common or rare	Arrives from south	Breeds	Resident or transient	Common or rare	Arrives from south	Breeds
Rose-breasted grosbeak		Sept 25	May 25, June 10	sr	c	May 6, 8			yes	sr	c	May 7		yes	sr	fc	May 13	yes	r			yes
Blue grosbeak																						
Indigo bunting		Oct 5, 11	May 30, June 15	sr		May 8, 12			yes	sr	fc	May 16		yes	sr		May 7, 12	yes	sr			yes
Painted bunting																						
Dickcissel																						
Lark bunting																						
Louisiana tanager				av	once			21 Dec. '81														
Scarlet tanager		Sept. 20, Oct. 12	May 25, June 15	sr	c	May 7			yes	sr	fc	May 7, 10		yes	sr		May 4, 13	yes	sr			yes
Summer tanager																						
Purple martin		Aug. 18, 25, Sept. 5	May 10, 30	sr	c				yes	r		Apr. 23		yes	r	fc		yes				
Cliff swallow		Sept. 1	May 30	sr	c	Apr. 30			yes	r	c	Apr. 23		yes	r,	ab		yes, June 4	c			yes
Barn swallow		Sept. 9, 16	May 10, 30	sr	c	Apr. 26			yes	sr	c	Apr. 22, 24		yes	sr	ab	Apr 21, 27	May 30	sr			yes
Tree swallow		Oct. 5, 25	May 15, 30	tv, sr	c unc				yes	sr				yes	sr	c	Apr 19	yes	r			yes
Bank swallow			May 15, June 1	sr	c	May 5			yes	sr	c			yes	sr	ab		June 1	sr			yes
Rough winged swallow		Aug	May 30, June 15												sr	unc		yes				
Bohemian waxwing	22 Feb. '04			wv	rare										wv	rare	11 Jan '80, Feb 2					
Cedar waxwing			June 10, 30	res	c				yes	sr	c			yes	sr	c		yes, June 28	r	c		yes
Northern shrike	Nov. 1, 29			wv	rare					wv	unc				wv	unc						
Migrant shrike		Oct 15	May 1, 18		unc					sr	fc			yes	sr	c	Mar 20, 26	Apr. 26, May 20	c			
Red-eyed vireo		Sept. 20, Oct. 5	May 18, June 6	sr	c	May 6			yes	sr	c	May 3		yes	sr	c	May 7	yes	sr			yes
Philadelphia vireo	Sept 18														r							
Warbling vireo		Sept. 14, 22	May 20, June 10	sr	c	Apr. 20, May 4			yes	r	c	Apr 29, May 2		yes	r	c		yes	sr			yes
Yellow-throated vireo		Sept 22	May 30	sr	c	May 3			yes	sr	fc	May 10		yes	r	fc			sr			
Blue-headed vireo	Sept. 6, 22	Sept. 20, Oct. 10		tv	rare					tv	unc	May 10			tv	unc						
Plumbeous vireo															r	fc		yes				
White-eyed vireo				sr						sr	rare											
Black and white warbler	Aug 20, 30	Sept. 18, 25	yes	tv	c	Apr. 28	May 15			tv, sr	fc, cc	May 1, 3			tv, sr	ab, fc		yes	sr			
Prothonotary warbler																						
Worm-eating warbler				sr	fc	May 8, 11, 15			yes													
Blue-winged warbler				sr	fc	May 16			yes													
Golden-winged warbler			yes	sr		May 21				sr	rare			yes								
Lawrence's warbler								July 7														
Brewster's warbler																						
Nashville warbler	Sept 18, 23	Oct 7		tv						tv	fc				tv	c			tv			
Orange-crowned warbler	Sept. 20					May 13				tv	unc											
Tennessee warbler				tv	rare																	
Southern parula warbler															tv, sr	ab, fc	Apr 28, May 5	yes	tv			
Northern parula warbler	Sept. 14, 19	Oct 3, 12	yes	tv		May 10				tv	fc				tv	rare						yes
Cape May warbler										tv	rare				r	ab	May 1	May 22	sr			
Yellow warbler		Sept. 25, Oct. 3	May 15, 30	sr	c	Apr. 29, May 6			yes	sr	ab	Apr 30, May 5		yes	tv, sr	ab, oc	Apr. 29	yes	sr			
Black-throated blue warbler	Aug 30	Oct. 2, 12	yes	tv	c	Apr. 29, May 3, 9	May 15			tv, sr	c, oc	May 8		yes	tv	ab	Apr. 26, Oct. 1		tv			
Myrtle warbler	Sept 8, 15	Oct. 25		tv, wv	c, oc		May 28			tv					tv, sr	fc, fc		yes	sr		May 9	
Magnolia warbler	Aug. 10, Sept. 10	Sept. 20, 28	yes	tv	c	Apr. 29, May 3	May 23			tv	fc	May 8										
Cerulean warbler			yes	tv	rare	May 10, 11	May 15, 17			sr	local	May 4, 9		yes	tv, sr	c, fc		yes	sr			
Chestnut-sided warbler	Sept. 1	Oct. 1, 14	yes	sr	c	May 4, 9, 11			yes	sr	fc	May 7		yes	tv	c	May 19					
Bay-breasted warbler	Sept. 5, 15	Sept. 25		tv		fc	May 20	June 4		tv	unc	May 9			tv	c	May 16, 20					
Black-poll warbler	Sept. 19, 28	Oct. 20, Nov. 22		tv	c		May 20	June 1		tv	fc	May 20			tv, sr	c, rare	May 10		tv	c	May 9, 23	
Blackburnian warbler	Aug. 30, Sept. 12	Oct. 3, 13	yes	tv	fc	Apr. 29, May 3	May 15			tv	c	May 8										yes
Yellow-throated warbler																			sr			
Black-throated green warbler	Aug. 30	Oct. 4, 25	yes	sr		Apr. 30, May 9			yes	tv		May 8			tv	fc	May 10					
Pine warbler		Oct 7	yes	sr	unc	May 10				tv	rare	May 6			tv	oc						
Palm warbler	Oct. 7	Oct. 16								tv	rare	May 12			tv	oc						
Yellow palm warbler				tv																		
Prairie warbler															sr	rare		June 2				
Ovenbird		Sept. 18	May 25, June 12	sr	c	May 3		Sept. 18	yes	r	c			yes	sr	ab	May 5	June 7	sr			yes
Water thrush		Oct. 1	yes	tv	fc	Apr. 22		Sept. 19		tv, sr	fc, cc	Apr. 24, 30			r		May 10					
Grinnell's water-thrush																						
Louisiana water thrush		Aug. 20	yes	sr					yes	sr	unc			yes	tv		May 10					
Kentucky warbler				sr		May 13, 23																
Connecticut warbler																						
Mourning warbler		Sept 20	June 10, 26	tv	fc	May 1, 10				r	unc			yes		c	May 8, 10, 14	yes	sr			
Northern yellow-throat		Oct 10	yes	sr	c	Apr. 29, May 8		Sept. 15	yes	sr	c	May 7		yes	sr				sr	rare		
Yellow-breasted chat		Sept. 1		sr	unc	May 6, 13			yes		rare	May 8, 13										
Hooded warbler		Aug. 30		sr	c				yes	sr	local			yes	sr							
Wilson warbler		Sept. 25								tv	unc		May 28		tv	unc			tv			
Canadian warbler		Aug 30, Sept 12	yes	tv	c	Apr. 27, May 10	May 15			tv					tv, sr							
American redstart		Sept. 25, Oct 3	May 25, June 10	sr	c	Apr. 29, May 3		Sept. 19	yes	r	c	May 7		yes	sr	ab	May 7, 16	May 26	sr			
American pipit	Sept. 20, 25	Oct 27, Nov. 14								tv	c, fall				tv							
Mockingbird															av			May 25	sr			
Catbird		Sept 25, Oct. 10	May 25, June 15	sr	c	May 1, 5			yes	r	ab	May 9		yes	sr	c	May 1	May 17	r			
Brown thrasher		Sept 30	May 25	sr	c	Apr. 28			yes	sr	local			yes	sr	c		ce June 18	sr			
Carolina wren																						
House wren		Sept. 20	yes	sr	c	Apr. 30			yes	r	c	Apr. 23, May 8		yes	sr	c	May 1		tv			
Winter wren	Sept 9, 25	Oct. 30, 30		wv						tv	fc				tv							
Short-billed marsh wren										r	rare, local			May 30, June 1		rare		June 1	sr	local		
Long-billed marsh wren		Oct 25	June 1, 15	sr	c	Apr. 30			yes	r					r				r			
Brown creeper	Sept 20, 25	Oct. 10, 25	local	tv						tv, sr	c, cc			May	tv, sr	local			r			
White-breasted nuthatch			May 10	res	c				yes	res				yes	res	c			tv			
Red-breasted nuthatch	Sept 24, Oct 1			wv	irreg					tv	unc		May 9		tv	fc						
Brown-headed nuthatch																						yes
Tufted titmouse					rare					wv		17 Mar. '89			res	ab		yes June 12	fc			
Chickadee			May 15	res	c				yes	res	c			yes	res							
Carolina chickadee																						
Hudsonian chickadee																						
Golden-crowned kinglet	Sept 2, 24	Oct 25, Nov. 15		tv	c					tv, wv	c, oc	Mar 25	May 10		tv, wv	ab, rare			tv			
Ruby-crowned kinglet	Sept 20, 26	Oct 10, 24		tv	c	Apr. 10, 22				tv	c	Apr 20	May 12		tv	ab						
Blue-gray gnatcatcher																						
Townsend's solitaire																						
Wood thrush		Sept 16 Oct 15	May 25, June 10	sr	c					sr	c	May 7		yes	sr	ab	May 12	yes June 7	sr			
Wilson's thrush		Sept 20, Oct. 13	May 20, 30	sr	c	Apr. 27, May 5			yes	sr	fc	Apr. 30, May 7		yes	sr	c	May 5, 12					
Gray-cheeked thrush	Sept. 15	Oct. 12				Apr. 30, May 8			yes	tv					tv	unc						
Bicknell's thrush																			tv			
Olive-backed thrush	Sept 6, 18	Oct 5, 16		tv						tv	c				tv	c						yes
Hermit thrush	Sept. 25, 30	Oct 20, 28		tv, wv	c, rare	Mar. 25, Apr 9	May 5			tv	c				tv, r	un	Mar. 10, 16, 21	yes May 1	r			
American robin		Nov. 10, 20	Apr. 15, May 5	sr, res	ab, oc	Mar. 1			yes	sr	ab	Mar 5, 23		yes	sr res	ab, rare						yes
Varied thrush																						
Wheatear																						
Bluebird		Oct. 21, Nov 3	Apr 15, May 10	sr, res	c, oc	Mar 4			yes	sr	c	Mar. 15		yes	sr	ab	Mar 23	Apr 28 May 15	sr			

SPECIES RECORDED	PUTNAM					RENSSELAER						
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	
Rose-breasted grosbeak	sr	ab	May 6, 9		yes	tv, sr	fc, rare					ye
Blue grosbeak												
Indigo bunting	sr	ab	May 9, 15		yes	sr	c					ye
Painted bunting												
Dickcissel						sr	unc					
Lark bunting												
Louisiana tanager												
Scarlet tanager	sr	c	May 6, 9		yes	sr	c					ye
Summer tanager		rare	18 May '60			av		18 May '60				
Purple martin	sr	c			yes	sr	c, formerly					ye
Cliff swallow	sr	ab	May 1		yes	sr	local					ye
Barn swallow	sr	ab	Apr. 17		yes	sr	c					ye
Tree swallow	sr	c			yes	tv, sr	c, oc					
Bank swallow	sr	ab	Apr. 30		yes	sr	c	Apr. 30				ye
Rough-winged swallow						sr	unc					
Bohemian waxwing						wv						
Cedar waxwing	sr, res	c, oc			yes	sr, res	c, oc					ye
Northern shrike	wv	unc				wv	fc					
Migrant shrike	sr	unc			May 1, 7, 18	sr	rare					
Red-eyed vireo	sr	c	May 2, 7		yes	sr	c				Sept. 27	ye
Philadelphia vireo						tv	rare	May 15				
Warbling vireo	sr	fc			yes	sr	c				Sept. 27	ye
Yellow-throated vireo	sr	c	May 3, 7		yes	sr	fc					
Blue-headed vireo	tv	unc	Apr. 21			tv	fc			Sept. 27		
Plumbeous vireo												
White-eyed vireo	sr	c	May 7		yes	sr	rare					ye
Black and white warbler	sr	c	Apr. 25, 28		yes	tv, sr	c, fc	Apr. 19, May 7				ye
Prothonotary warbler												
Worm-eating warbler												
Blue-winged warbler	sr	rare	May 6, 15		yes							
Golden-winged warbler	tv	rare	May 6, 12			sr	rare	May '04			6 July '61	
Lawrence warbler												
Brewster warbler												
Nashville warbler	tv	c	May 4, 6			tv		May 11				
Orange-crowned warbler												
Tennessee warbler	tv	rare	May 11, 16									
Southern parula warbler												
Northern parula warbler	tv	c	May 11, 15			tv	c	May 17				
Cape May warbler	tv	rare	May 10	May 14, 18		tv	rare	May 13				
Yellow warbler	sr	ab	May 2		yes	sr	c	Apr. 30, May 10				ye
Black-throated blue warbler	tv	c	May 9			tv	c	Apr. 26	May 13			
Myrtle warbler	tv	c				tv	c	May 20		Sept. 27, Oct. 5	Oct. 25	
Magnolia warbler	tv	c	May 7, 9	May 25		tv, sr	—, fc	May 7, 11				ye
Cerulean warbler							rare	11 May '76				
Chestnut-sided warbler	sr	c	May 9, 10		yes	tv, sr	c, ab	May 5				ye
Bay-breasted warbler	tv	c	May 9, 15	May 25		tv	c			Sept. 4		
Black-poll warbler	tv	c	May 17, 20	June 1		tv	c					
Blackburnian warbler	tv	c	May 9	May 25		tv	c	May 12				
Yellow-throated warbler												
Black-throated green warbler	tv	c	Apr. 29, May 9	May 25		tv	c	May 5			Sept. 17, 29	
Pine warbler						tv		Apr.			Oct.	
Palm warbler												
Yellow palm warbler	tv	c	Apr. 16, 24	May 5, 20								
Prairie warbler												
Ovenbird	sr	c	May 2, 3		yes	sr	c	May 5, 10				ye
Water-thrush						tv	fc					
Grinnell water-thrush												
Louisiana water-thrush	sr	c	Apr. 24		yes	sr		Apr. 28				ye
Kentucky warbler												
Connecticut warbler						tv	unc					
Mourning warbler	tv	rare	May 14			tv	unc					
Northern yellow-throat	sr	c	May 5, 9		yes	sr	c	May 7, 11, 13			Sept. 12	ye
Yellow-breasted chat	sr	c	May 4, 12		yes	sr	fc					ye
Hooded warbler												
Wilson warbler	tv	c	May 12, 13	May 20		tv	c	May 24				
Canadian warbler	tv	c	May 9, 13	May 20		tv	c					
American redstart	sr	c	May 2, 4		yes	sr	c	May 7, 13			Sept. 19	ye
American pipit						tv	fc	Apr. 27, May 3	May 4, 12	Oct.		
Mockingbird												
Catbird	sr	c	May 3		yes	sr	c	May 13			Oct. 21	ye
Brown thrasher	sr	c	Apr. 20, 30		yes	sr	c					ye
Carolina wren												
House wren	sr	c	Apr. 23, 30		yes	sr	c					ye
Winter wren	wv	unc				tv	c	Mar. 25		Oct.	Nov	
Short-billed marsh wren						sr	local					ye
Long-billed marsh wren	sr	unc	May 13		yes	sr	c				Sept. 25	ye
Brown creeper	wv	c				tv, wv	c, oc					
White-breasted nuthatch	res	c			yes	res	c					ye
Red-breasted nuthatch	tv	c	May 1	May 15		tv, wv	c, oc					
Brown-headed nuthatch												
Tufted titmouse												
Chickadee	res	c			yes	res	c					M
Carolina chickadee												
Hudsonian chickadee												
Golden-crowned kinglet	tv	c	Apr. 1	Apr. 20		tv	c	Mar.	Apr.	Oct.	Dec.	
Ruby-crowned kinglet	tv					tv	c	Apr.				
Blue-gray gnatcatcher												
Townsend solitaire												
Wood thrush	sr	c	Apr. 23, May 2		yes	sr	c				Oct. 10	ye
Wilson thrush	sr	c	Apr. 25, May 8		yes	sr	c				Oct.	ye
Gray-cheeked thrush						tv	unc					
Bicknell thrush												
Olive-backed thrush	tv					tv	fc					
Hermit thrush	tv					tv, sr	c, rare	Apr. 23				ye
American robin	sr	ab	Mar. 4, 14		yes	sr, wv	ab, rare	Feb. 22, Mar. 10				ye
Varied thrush												
Wheatear												
Bluebird	sr	c	Feb. 22, Mar. 9		yes	sr	c	Mar. 2, 9			Oct. 15, 25	ye

	RICHMOND						ROCKLAND			
	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north
	fc	May 6					sr		May 9	
	c					yes	sr	c	May 8	
	c					yes	sr	fc	May 10	
	unc					yes	sr	fc, local		
	local					yes	sr	ab	Apr. 17	
	ab	Apr. 18			Nov. 8		tv, sr	c, oc		
	c						sr	fc		
	c, local						sr	fc		
						yes	res	c		
	fc						wv	rare		
	unc				18, 30 Aug. '06, 2 Sept. '07		tv	rare		
	unc					yes	sr	ab	May	
	c									
						yes	tv, sr	fc, local		
	fc, formerly					yes	tv, sr	c, oc	May 1, 5	
	unc						tv			
	oc									
						yes	sr	fc	May 10	
	c	Apr. 30				yes	tv, sr	c, oc	Apr. 25, May 6	
	c, rare	Apr. 25								
							sr	unc	Apr. 24	
						yes	sr	fc	Apr. 22	
	fc	May 24					sr	rare		
	once								May '78, '32	
							tv	unc		May 16
							tv	unc		May 15
	rare, Oct. '04									
							tv	fc		May 24
	c		May 24		Sept. 26					
						yes	sr	ab	Apr. 28	
	c	Apr. 28					tv	c	Apr. 24, May 3	
	c	Apr. 24					tv, wv	c, oc	Apr. 4, 22	
	c, irreg	Apr. 22	Apr. 30, May 20				tv	c	May 6, 15	
	fc									
							tv, sr	c, fc	May 2	
	fc	May 5					tv	fc	May 9	
	unc						tv	c	May 22	May 30
	ab	May 25					tv	fc	May 5, 10	May 15
	fc									
							tv, sr	ab, unc	May 3, 10	May 20
	fc	May 2		Sept. 20						
	fc									
	rare, 7 Oct. '07						tv	fc	Mar. 30, Apr. 19	
	fc						tv	oc	May 12	
	unc	May 11				yes	sr	c	May 1	
	c, unc	Apr. 25					tv	unc		
	c									
							sr	fc		
							sr	unc		
	fc, fall									
						yes	sr	c	May 6	
	c	May 6				yes	sr	ab	May 8	
	c, local	Apr. 13, May 8					sr	c	May 10	
	fc	May 10					tv	oc	May 12	
	unc	May 12					tv	c	May 10, 12	May 27
	fc	May 20					sr	c	May 1	
	c, unc	May 26		Sept. 14	Oct. 3					
	irreg									
						yes	sr	ab	Apr. 30, May 2	
	ab	Apr. 30, May 2				yes	sr	c	Apr. 21, May 2	
	c	Apr. 21, May 2				yes	res	rare		
	unc					yes	sr	c	Apr. 27	
	c, local	Apr. 27					wv	unc		May 1
	unc									
	rare									
	c	May 10			Oct. 15	yes	sr	c		May 15
	c, fc		May 15				res, wv	fc		
	c			Oct. 1			tv, wv	c, irreg	Apr. 16	
	irreg					yes				
						yes				
	c					yes	res	c		
	c									
							wv	c		Apr. 25
	c, unc		Apr. 25				tv	fc		
	fc									
						yes	sr	c	Apr. 27, May 1	
	c	Apr. 27, May 1					sr	c	Apr. 29, May 5	
	c, fc	Apr. 29								
	c									
							tv	c		
	c						tv, wv	c, oc	Apr. 1	
	c	Apr.				yes	sr, res	ab, oc	Mar. 3, 11	
	c, oc	Feb. 24, Mar. 3, 11								
						yes	res	c		
, wr	ab, fc, unc	Mar. 14								

SPECIES RECORDED	PUTNAM					RENSSELAER						
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds
Rose-breasted grosbeak	sr	ab	May 6, 9		yes	tv, sr	fc, rare					yes
Blue grosbeak												
Indigo bunting	sr	ab	May 9, 15		yes	sr	c					yes
Painted bunting												
Dickcissel						sr	unc					
Lark bunting												
Louisiana tanager												
Scarlet tanager	sr	c	May 6, 9		yes	sr	c					yes
Summer tanager		rare	18 May '00			av		18 May '60				
Purple martin	sr	c			yes	sr	c, formerly					yes
Cliff swallow	sr	ab	May 1		yes	sr	local					yes
Barn swallow	sr	ab	Apr. 17		yes	sr	c					yes
Tree swallow	sr	c			yes	tv, sr	c, oc					
Bank swallow	sr	ab	Apr. 30		yes	sr	c	Apr. 30				yes
Rough-winged swallow						sr	unc					
Bohemian waxwing						wv						
Cedar waxwing	sr, res	c, oc			yes	sr, res	c, oc					yes
Northern shrike	wv	unc				wv	fc					
Migrant shrike	sr	unc			May 1, 7, 18	sr	rare					
Red-eyed vireo	sr	c	May 2, 7		yes	sr	c				Sept. 27	yes
Philadelphia vireo						tv	rare	May 15				
Warbling vireo		fc			yes	sr	c				Sept. 27	yes
Yellow-throated vireo	sr	c	May 3, 7		yes	sr	fc					
Blue-headed vireo	tv	unc	Apr. 21			tv	fc			Sept. 27		
Plumbeous vireo												
White-eyed vireo	sr	c	May 7		yes	sr	rare					yes
Black and white warbler	sr	c	Apr. 25, 28		yes	tv, sr	c, fc	Apr. 19, May 7				yes
Prothonotary warbler												
Worm-eating warbler												
Blue-winged warbler	sr	rare	May 6, 15		yes							
Golden-winged warbler	tv	rare	May 6, 12			sr	rare	May '04			6 July '61	
Lawrence warbler												
Brewster warbler												
Nashville warbler	tv	c	May 4, 6			tv		May 11				
Orange-crowned warbler												
Tennessee warbler	tv	rare	May 13, 16									
Southern parula warbler												
Northern parula warbler	tv	c	May 11, 15			tv	c	May 17				
Cape May warbler	tv	rare	May 10	May 14, 18		tv	rare	May 13				
Yellow warbler	sr	ab	May 2		yes	sr	c	Apr. 30, May 10				yes
Black-throated blue warbler	tv	c	May 9			tv	c	Apr. 26	May 13			
Myrtle warbler	tv	c				tv	c	May 20		Sept. 27, Oct. 5	Oct. 25	
Magnolia warbler	tv	c	May 7, 9	May 25		tv, sr	—, fc	May 7, 11				yes
Cerulean warbler							rare	17 May '70				
Chestnut-sided warbler	sr	c	May 9, 10		yes	tv, sr	c, ab	May 5				yes
Bay-breasted warbler	tv	c	May 9, 15	May 25		tv	c			Sept. 4		
Black-poll warbler	tv	c	May 17, 20	June 1		tv	c					
Blackburnian warbler	tv	c	May 9	May 25		tv	c	May 12				
Yellow-throated warbler												
Black-throated green warbler	tv	c	Apr. 29, May 9	May 25		tv	c	May 5			Sept. 17, 29	
Pine warbler						tv		Apr.			Oct.	
Palm warbler												
Yellow palm warbler	tv	c	Apr. 16, 24	May 5, 20								
Prairie warbler												
Ovenbird	sr	c	May 2, 3		yes	sr	c	May 5, 10				yes
Water-thrush						tv	fc					
Grinnell water thrush												
Louisiana water-thrush	sr	c	Apr. 24		yes	sr		Apr. 28				yes
Kentucky warbler												
Connecticut warbler						tv	unc					
Mourning warbler	tv	rare	May 14			tv	unc					
Northern yellow-throat	sr	c	May 5, 9		yes	sr	c	May 7, 11, 13			Sept. 12	yes
Yellow-breasted chat	sr	c	May 4, 12		yes	sr	fc					yes
Hooded warbler												
Wilson warbler	tv	c	May 12, 13	May 20		tv	c	May 24				
Canadian warbler	tv	c	May 9, 13	May 20		tv	c					
American redstart	sr	c	May 2, 4		yes	sr	c	May 7, 13			Sept. 19	yes
American pipit						tv	fc	Apr. 27, May 3	May 4, 12	Oct.		
Mockingbird												
Catbird	sr	c	May 3		yes	sr	c	May 13			Oct. 21	yes
Brown thrasher	sr	c	Apr. 20, 30		yes	sr	c					yes
Carolina wren												
House wren	sr	c	Apr. 23, 30		yes	sr	c					yes
Winter wren	wv	unc										
Short-billed marsh wren						tv	c	Mar. 25		Oct.	Nov.	
Long-billed marsh wren	sr	unc	May 13			sr	local					yes
Brown creeper	wv	c			yes	sr	c				Sept. 25	yes
White-breasted nuthatch	res	c				tv, wv	c, oc					
Red-breasted nuthatch	tv	c	May 1	May 15	yes	res	c					yes
Brown-headed nuthatch						tv, wv	c, oc					
Tufted titmouse												
Chickadee	res	c										
Carolina chickadee					yes	res	c					
Hudsonian chickadee												
Golden-crowned kinglet	tv	c	Apr. 1	Apr. 20		tv	c	Mar.	Apr.	Oct.	Dec.	
Ruby-crowned kinglet	tv					tv	c	Apr.				
Blue-gray gnatcatcher												
Townsend solitaire												
Wood thrush	sr	c	Apr. 21, May 2		yes	sr	c				Oct. 10	yes
Wilson thrush	sr	c	Apr. 25, May 8		yes	sr	c				Oct.	yes
Gray-cheeked thrush						tv	unc					
Bicknell thrush												
Olive-backed thrush	tv					tv	fc					yes
Hermit thrush	tv					tv, sr	c, rare	Apr. 23				yes
American robin	sr	ab	Mar. 4, 14		yes	sr, wv	ab, rare	Feb. 22, Mar. 10				yes
Varied thrush												
Wheatear												
Bluebird	sr	c	Feb. 22, Mar. 9		yes	sr	c	Mar. 2, 9			Oct. 15, 25	yes

SPECIES RECORDED	RICHMOND							ROCKLAND			
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north
Rose-breasted grosbeak	tv	fc	May 6					sr	c	May 9	
Blue grosbeak											
Indigo bunting	sr	c					yes	sr	c	May 8	
Painted bunting											
Dickcissel											
Lark bunting											
Louisiana tanager											
Scarlet tanager	sr	o					yes	sr	fc	May 13	
Summer tanager											
Purple martin	tv	unc						tv	ab		
Cliff swallow	sr	local					yes	sr	fc, local		
Barn swallow	sr	ab	Apr. 18				yes	sr	al	Apr. 17	
Tree swallow	tv	c				Nov. 8		tv, sr	c, oc		
Bank swallow	sr	c, local						sr	fc		
Rough-winged swallow								sr	fc		
Bohemian waxwing											
Cedar waxwing	sr	fc					yes	res	c		
Northern shrike	wv	unc						wv	rare		
Migrant shrike	tv	unc				18, 30 Aug. '00, 2 Sept. '07		tv	rare		
Red-eyed vireo	sr	c					yes	sr	ab	May	
Philadelphia vireo											
Warbling vireo	sr	fc, formerly					yes	tv, sr	fc, local		
Yellow-throated vireo	sr	unc					yes	tv, sr	c, oc	May 1, 5	
Blue-headed vireo	tv	oc						tv			
Plumbeous vireo							yes				
White-eyed vireo	sr	c	Apr. 30				yes	sr	fc	May 10	
Black and white warbler	tv, sr	c, rare	Apr. 25					tv, sr	c, oc	Apr. 25, May 6	
Prothonotary warbler											
Worm-eating warbler								sr	unc	Apr. 24	
Blue-winged warbler	sr	fc	May 24				yes	sr	fc	Apr. 22	
Golden-winged warbler								sr	rare		
Lawrence warbler		once									
Brewster warbler										May '78, '32	
Nashville warbler								tv	unc		May 10
Orange-crowned warbler											
Tennessee warbler	tv	rare, Oct. '04						tv	unc		May 15
Southern parula warbler											
Northern parula warbler	tv	c		May 24		Sept. 26		tv	fc		May 24
Cape May warbler											
Yellow warbler	sr	c	Apr. 28				yes	sr	ab	Apr. 28	
Black-throated blue warbler	tv	c	Apr. 24					tv	c	Apr. 24, May 3	
Myrtle warbler	tv, wr	c, irreg	Apr. 22	Apr. 30, May 20				tv, wv	c, oc	Apr. 4, 22	
Magnolia warbler	tv	fc						tv	c	May 6, 15	
Cerulean warbler											
Chestnut-sided warbler	tv	fc	May 5					tv, sr	c, fc	May 2	
Bay-breasted warbler	tv	unc						tv		May 9	
Black-poll warbler	tv	ab	May 25					tv	c	May 22	May 30
Blackburnian warbler	tv	fc						tv	fc	May 5, 10	May 15
Yellow-throated warbler											
Black-throated green warbler	tv	fc	May 2		Sept. 20			tv, sr	ab, unc	May 3, 10	May 20
Pine warbler	tv	fc									
Palm warbler	tv	rare, 7 Oct. '07						tv	fc	Mar. 30, Apr. 19	
Yellow palm warbler	tv	fc						tv	c	May 12	
Prairie warbler	tv	unc	May 11					sr	c	May 1	
Ovenbird	tv, sr	c, unc	Apr. 25				yes	tv	unc		
Water-thrush	tv	c									
Grinnell water thrush								sr	fc		
Louisiana water-thrush								sr	unc		
Kentucky warbler											
Connecticut warbler	tv	fc, fall									
Mourning warbler							yes	sr	c	May 6	
Northern yellow-throat	sr	c	May 6				yes	r	ab	May 8	
Yellow-breasted chat	sr	c, local	Apr. 13, May 8					r	c	May 10	
Hooded warbler	sr	fc	May 10					tv	c	May 12	
Wilson warbler	tv	unc	May 12					tv	c	May 10, 12	May 27
Canadian warbler	tv	fc	May 20					r	c	May 1	
American redstart	tv, sr	c, unc	May 26		Sept. 14	Oct. 3					
American pipit	tv	irreg									
Mockingbird	av										
Catbird	sr	ab	Apr. 30, May 2				yes	r	ab	Apr. 30, May 2	
Brown thrasher	sr	c	Apr. 21, May 2				yes	sr	c	Apr. 21, May 2	
Carolina wren	res	unc					yes	res	rare		
House wren	sr	c, local	Apr. 27				yes	sr	c	Apr. 27	
Winter wren	wv	unc						wv	unc		May 1
Short-billed marsh wren	sr	rare				Oct. 15	yes	sr	c		
Long-billed marsh wren	sr	c	May 10					sr	fc		May 15
Brown creeper	tv, wv	c, fc		May 15				res, wv	fc, c		
White-breasted nuthatch	res, wv	c			Oct. 1			tv, wv	irreg	Apr. 16	
Red-breasted nuthatch	tv	irreg					yes				
Brown-headed nuthatch							yes				
Tufted titmouse	res	c					yes	res	c		
Chickadee	res	c									
Carolina chickadee								wv	c		Apr. 25
Hudsonian chickadee								tv	fc		
Golden-crowned kinglet	tv, wv	c, unc		Apr. 25							
Ruby-crowned kinglet	tv	fc									
Blue-gray gnatcatcher											
Townsend solitaire							yes	sr	c	Apr. 27, May 1	
Wood thrush	sr	c	Apr. 27, May 1					r	c	Apr. 29, May 8	
Wilson thrush	tv, sr	c, fc	Apr. 29								
Gray-cheeked thrush	tv	c									
Bicknell thrush								tv	c		
Olive-backed thrush	tv	c						tv, wv	c, oc	Apr. 1	
Hermit thrush	tv	c					yes	sr, res	ab, oc	Mar. 3, 11	
American robin	tv	c	Apr.								
Varied thrush	sr, res	c, oc	Feb. 24, Mar. 3, 11								
Wheatear							yes	res	c		
Bluebird	tv, sr, wr	ab, fc, unc	Mar. 14								

SPECIES RECORDED	ROCKLAND (*continued*)			ST LAWRENCE							
	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Breeds	Resident or transient	Common or rare	Arrives from south	Lea fo nor
Rose-breasted grosbeak			yes	sr	unc		yes	sr	fc	May 7, 9	
Blue grosbeak											
Indigo bunting		Oct.	June 15	sr	unc		yes	sr	fc	May 9, 14, 21	
Painted bunting											
Dickcissel											
Lark bunting											
Louisiana tanager											
Scarlet tanager			yes	sr	unc		yes	sr	fc	May 8, 15	
Summer tanager											
Purple martin				sr		Apr. 16	yes	sr	oc		
Cliff swallow			yes	sr	ab		yes	sr	c	Apr. 26, May 5	
Barn swallow			yes	sr	ab		yes	sr	ab	Apr. 14, 28	
Tree swallow			yes	sr			yes	sr	fc	Apr. 16	
Bank swallow			yes	sr	ab		yes	sr	c	Apr. 30	
Rough-winged swallow			yes					sr	unc	Apr. 21, May 3	
Bohemian waxwing								wv	rare		2 Mar.
Cedar waxwing			yes	sr	c		yes	sr, res	c, oc		
Northern shrike				wv	oc			wv	unc		Apr. 2
Migrant shrike	Aug. 24			sr	fc	Apr.	yes				
Red-eyed vireo			June 1, 8, 15	sr	c		yes	sr	c	May 13, 19	
Philadelphia vireo											
Warbling vireo				sr	fc		yes	sr	c	May 1, 6	
Yellow-throated vireo			yes	sr	unc		yes	sr	fc	May 7	
Blue-headed vireo				sr	unc			tv	oc	May 5	May 15
Plumbeous vireo											
White-eyed vireo			June 5								
Black and white warbler			yes	sr	fc		yes	tv	fc	Apr. 27, May 3, 10	
Prothonotary warbler											
Worm-eating warbler			yes								
Blue-winged warbler			yes								
Golden-winged warbler			yes					tv	once	10 May '06	
Lawrence warbler											
Brewster warbler											
Nashville warbler				tv				tv	fc	May 1, 7	
Orange-crowned warbler											
Tennessee warbler											
Southern parula warbler											
Northern parula warbler		Sept. 26		sr				tv	fc	May 7, 12	
Cape May warbler								tv	rare	May 12	
Yellow warbler			yes	sr	ab	May 10	yes	sr	c	May 1, 4, 9	
Black-throated blue warbler	Sept. 12			sr				tv	c	May 3, 9	May 14
Myrtle warbler				tv	c			tv	c	May 3	May 15
Magnolia warbler	Aug. 28			sr				tv	fc	Apr. 29, May 12	May 22
Cerulean warbler											
Chestnut-sided warbler		Oct. 4	yes	sr	rare		yes	tv, sr	fc, oc	May 4, 13	
Bay-breasted warbler				tv				tv	unc	May 14, 18	May 22
Black-poll warbler				tv				tv		May 24	
Blackburnian warbler				sr				tv	fc	May 3, 11	
Yellow-throated warbler											
Black-throated green warbler			yes	sr				tv, sr	ab, fc	Apr. 29, May 9	
Pine warbler								tv	oc		May 15
Palm warbler				tv							
Yellow palm warbler											
Prairie warbler											
Ovenbird			May 25	sr	c		yes	sr	ab	Apr. 29, May 10, 22	
Water-thrush				sr				tv	oc	May 10	
Grinnell water-thrush											
Louisiana water-thrush			May 18								
Kentucky warbler			yes								
Connecticut warbler								tv	oc	May 30	
Mourning warbler				sr						May 22	
Northern yellow-throat			yes	sr	fc		yes	sr	c	May 3, 12, 16	
Yellow-breasted chat			June 13					sr	oc		
Hooded warbler			June 15, July 1								
Wilson warbler				tv				tv	fc	May 15	
Canadian warbler				sr				tv	c	May 15	
American redstart		Oct. 3	May	sr	fc		yes	sr	c	May 5, 13, 19	
American pipit								tv	oc		
Mockingbird											
Catbird			May 25	sr	c	May 13	yes	sr	ab	May 10, 13	
Brown thrasher			yes	sr	fc	May 10	yes	sr	fc	Apr. 28, May 5	
Carolina wren			yes								
House wren			yes	sr	fc	May 12	yes	sr	oc		
Winter wren				sr				tv	fc	Apr. 30	
Short-billed marsh wren											
Long-billed marsh wren		Oct. 15	yes	sr				sr	oc		
Brown creeper				tv, sr	c, local			tv	fc	Apr. 10, 22	
White-breasted nuthatch			yes	res	fc		yes	res	c		
Red-breasted nuthatch				sr	local			wv	oc		
Brown-headed nuthatch											
Tufted titmouse											
Chickadee			yes	res	c		yes	res	ab		
Carolina chickadee											
Hudsonian chickadee											
Golden-crowned kinglet				tv	c	Apr. 19		tv	c	Apr. 10	
Ruby-crowned kinglet				tv	c			tv	fc	Apr. 30	
Blue-gray gnatcatcher											
Townsend solitaire											
Wood thrush			yes	sr				sr	c	Apr. 28, May 5, 12	
Wilson thrush			May 25	sr				sr	c	May 1, 8, 16	
Gray-cheeked thrush											
Bicknell thrush											
Olive-backed thrush				tv, sr	c, local			tv		May 8	
Hermit thrush		Nov. 1, 8		sr	fc			tv	c	Apr. 15	May 1
American robin			yes	sr	ab	Mar. 28	yes	sr	ab	Mar. 7, 15	
Varied thrush											
Wheatear											
Bluebird			yes	sr	fc		yes	sr	c	Mar. 2, 15, 30	

			SCHENECTADY				SCHOHARIE			SCHUYLER		
rns n th	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Breeds	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Breeds
	Aug. 20	May 30	sr	oc			sr		yes	sr		yes
	Aug. 13	May 22, June 29	sr	fc			sr	c	yes	sr	c	yes
	Sept	June 5, 15	sr				sr			sr		yes
		yes	sr	oc			sr	unc		sr	unc	
	Aug. 7, 10	June 1	sr							sr	ab	yes
	Aug. 28, Sept. 7	May 20	sr	ab			sr	c	yes	sr	c	yes
		yes	sr							tv, sr	ab, oc	yes
		yes	sr	c			sr		yes	sr	c	yes
	July 20, 30	May 22, 30										
04												
		June 13	sr	c			sr	c	yes	sr, res	c, oc	yes
			wv	oc			wv			wv		
							sr			sr	c	yes
	Sept. 15	June 2, 29	sr	c			sr	c	yes	sr	c	yes
	Sept. 17	June 1, 15	sr	c			sr			sr		
		May 12, 25	sr	fc			sr			sr		
	Sept. 30		tv							tv		
	Sept. 5, 7		tv	c			sr			sr	fc	yes
			tv				tv			tv		
			tv	rare	10 May '76							
			tv				tv			tv		
	Aug	May 22, June 17	sr	c		yes	sr	c	yes	sr	c	yes
	Sept. 15, 21		tv	c			tv			tv, sr	c, oc	
	Oct. 15, 27		tv	c			tv	c		tv	ab	
	Sept. 15		tv	fc			tv			tv		
		yes	tv, sr	c oc			sr			sr		
			tv									
			tv				tv			tv		
	Aug. 15, 30		tv				tv			tv		
	Oct. 15	yes	tv				sr			sr		
	Sept. 1		res, sr	rare, fc								
	Sept. 15, Oct. 3	June 1	sr	c		yes	sr	c	yes	sr	c	yes
			tv		Apr. 25					tv		
										sr	local	
	Sept. 5	June 15	sr			yes	sr			sr	c	yes
		yes					sr	May	yes			
			tv									
	Sept. 1, 12		tv	c								
	Sept. 7	May 22, 30	sr	c		yes	sr			sr	ab	yes
	Oct. 15		tv							tv		
	Oct. 1, 7	May 15, 28	sr	c		yes	sr		yes	sr	ab	yes
		yes	sr	fc	Apr. 28	yes	sr			sr	ab	yes
		yes	sr	oc		yes	sr			sr	ab	yes
	Oct. 1, 20		tv									
			sr	local						sr	c	yes
	Nov. 1		tv				tv			tv	c	
		yes	res			yes	res			res	ab	yes
	Oct. 25		wv									
		May 4, 30	res	c		yes	res	c	yes	res	c	yes
	Nov. 1		tv	c			tv	c		tv	c	
	Oct		tv	fc			tv			tv		
	Oct	June 1, 15	sr				sr			sr	c	yes
	Aug. 30, Sept. 1	June 13	sr	c		yes	sr			sr	c	yes
			tv				tv			tv		
			tv	c	Apr. 27		tv			tv		
	Nov. 1, 26	Apr. 10, 26	sr	ab	Mar. 8	yes	sr	ab	yes	sr	ab	yes
	Nov. 1, 10	Apr. 8, May 4	sr	c	Mar. 11	yes	sr	c	yes	sr	fc	yes

SPECIES RECORDED	ROCKLAND (*continued*)			ST LAWRENCE				SARATOGA							SCHENECTADY				SCHOHARIE			SCHUYLER		
	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Breeds	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Breeds
Rose-breasted grosbeak			yes	sr	unc		yes	sr	fc	May 7, 9			Aug. 20	May 30	sr	oc			sr		yes	sr		yes
Blue grosbeak																								
Indigo bunting		Oct	June 15	sr	unc		yes	sr	fc	May 9, 14, 21			Aug. 23	May 22, June 29	sr	fc			sr	c	yes	sr	c	yes
Painted bunting																								
Dickcissel																								
Lark bunting																								
Louisiana tanager																								
Scarlet tanager			yes	sr	unc		yes	sr	fc	May 8, 15			Sept	June 5, 15	sr				sr			sr		yes
Summer tanager																								
Purple martin				sr		Apr. 16	yes	sr	oc					yes	sr	oc			sr	unc		sr	unc	
Cliff swallow			yes	sr	ab		yes	sr	c	Apr. 26, May 5			Aug. 7, 10	June 1	sr				sr	ab	yes	sr	ab	yes
Barn swallow			yes	sr	ab		yes	sr	ab	Apr. 14, 28			Aug. 28, Sept. 7	May 20	sr	ab			sr	c	yes	sr	c	yes
Tree swallow			yes	sr			yes	sr	fc	Apr. 16				yes	sr				tv, sr	ab, oc		tv, sr	ab, oc	yes
Bank swallow			yes	sr	ab		yes	sr	c	Apr. 30				yes	sr	c			sr	c	yes	sr	c	yes
Rough-winged swallow			yes					sr	unc	Apr. 21, May 3			July 20, 30	May 22, 30										
Bohemian waxwing								wv	rare			2 Mar. '91	24 Feb. '04											
Cedar waxwing			yes	sr	c		yes	sr, res	c, oc					June 13	sr	c			sr	c	yes	sr, res	c, oc	yes
Northern shrike				wv	oc			wv	unc			Apr. 2	Nov		wv	oc			wv			wv		
Migrant shrike	Aug. 24			sr	fc	Apr	yes												sr			sr	c	yes
Red-eyed vireo			June 1, 8, 15	sr	c		yes	sr	c	May 13, 19			Sept. 15	June 2, 29	sr	c			sr	c	yes	sr	c	yes
Philadelphia vireo																								
Warbling vireo				sr	fc		yes	sr	c	May 1, 6			Sept. 17	June 1, 15	sr	c			sr			sr		
Yellow-throated vireo			yes	sr	unc		yes	sr	fc	May 7				May 12, 25	sr	fc			sr			sr		
Blue-headed vireo				sr	unc			tv	oc	May 5	May 15, 28		Sept. 30		tv							tv		
Plumbeous vireo																								
White-eyed vireo			June 5																					
Black and white warbler			yes	sr	fc		yes	tv	fc	Apr. 27, May 3, 10			Sept. 5, 7		tv	c			sr			sr	fc	yes
Prothonotary warbler																								
Worm-eating warbler			yes																					
Blue-winged warbler			yes																					
Golden-winged warbler			yes					tv	once	10 May '06														
Lawrence warbler																								
Brewster warbler																								
Nashville warbler				tv				tv	fc	May 1, 7					tv				tv			tv		
Orange-crowned warbler															tv	rare	10 May '76							
Tennessee warbler																								
Southern parula warbler																								
Northern parula warbler		Sept. 26		sr				tv	fc	May 7, 12					tv				tv			tv		
Cape May warbler								tv	rare	May 12														
Yellow warbler			yes	sr	ab	May 10	yes	sr	c	May 1, 4, 9			Aug	May 22, June 17	sr	c		yes	sr	c	yes	sr	c	yes
Black-throated blue warbler	Sept. 12			sr				tv	c	May 3, 9	May 14, 22		Sept. 15, 21		tv	c			tv			tv, sr	c, oc	
Myrtle warbler				tv	c			tv	c	May 3	May 15		Oct. 15, 27		tv	c			tv	c		tv	ab	
Magnolia warbler	Aug. 28			sr				tv	fc	Apr. 29, May 12	May 22, 30		Sept. 15		tv	fc			tv			tv		
Cerulean warbler																								
Chestnut-sided warbler		Oct. 4	yes	sr	rare		yes	tv, sr	fc, oc	May 4, 13				yes	tv, sr	c oc			sr			sr		
Bay-breasted warbler				tv				tv	unc	May 14, 18	May 22, 30				tv							tv		
Black-poll warbler				tv				tv		May 24					tv				tv			tv		
Blackburnian warbler				sr				tv	fc	May 3, 11		Aug. 11	Aug. 15, 30		tv				tv					
Yellow-throated warbler																								
Black-throated green warbler			yes	sr				tv, sr	ab, fc	Apr. 29, May 9			Oct. 15	yes	tv				sr			sr		
Pine warbler								tv	oc		May 15		Sept. 1		res, sr	rare, fc								
Palm warbler				tv																				
Yellow palm warbler																								
Prairie warbler																								
Ovenbird			May 25	sr	c		yes	sr	ab	Apr. 29, May 10, 22			Sept. 15, Oct. 3	June 1	sr	c	Apr. 25	yes	sr	c	yes	sr	c	yes
Water-thrush				sr				tv	oc	May 10					tv							tv		
Grinnell water-thrush																								
Louisiana water-thrush			May 18																			sr	local	
Kentucky warbler			yes																					
Connecticut warbler																								
Mourning warbler				sr				tv	oc	May 30		Sept												
Northern yellow-throat			yes	sr	fc		yes	sr	c	May 22			Sept. 5	June 15	sr			yes	sr			sr	c	yes
Yellow-breasted chat			June 13					sr	oc	May 3, 12, 16				yes					sr		May			
Hooded warbler			June 15, July 1																					
Wilson warbler				tv											tv									
Canadian warbler				sr				tv	fc	May 15			Sept. 1, 12		tv	c						sr	ab	yes
American redstart		Oct. 3	May	sr	fc		yes	tv	c	May 15			Sept. 7	May 22, 30	sr	c		yes	sr			tv		
American pipit								sr	c	May 5, 13, 19			Oct. 15		tv									
Mockingbird								tv	oc															
Catbird			May 25	sr	c	May 13	yes	sr	ab	May 10, 13			Oct. 1, 7	May 15, 28	sr	c		yes	sr		yes	sr	ab	yes
Brown thrasher			yes	sr	fc	May 10	yes	sr	fc	Apr. 28, May 5				yes	sr	fc	Apr. 28	yes	sr			sr	ab	yes
Carolina wren			yes																					
House wren			yes	sr	fc	May 12	yes	sr	oc				Oct. 1, 20	yes	sr	oc		yes	sr			sr	ab	yes
Winter wren				sr				tv	fc	Apr. 30					tv									
Short-billed marsh wren																						sr	c	yes
Long-billed marsh wren		Oct. 15	yes	sr											sr	local			tv			tv	c	
Brown creeper				tv, sr	c, local			sr	oc				Nov. 1		tv				res			res	ab	yes
White-breasted nuthatch			yes	res	fc			tv	fc	Apr. 10, 22				yes	res			yes	res					
Red-breasted nuthatch				sr	local		yes	res	c				Oct. 25		wv									
Brown-headed nuthatch								wv	oc															
Tufted titmouse																								
Chickadee			yes	res	c									May 4, 30	res	c		yes	res	c	yes	res	c	yes
Carolina chickadee							yes	res	ab															
Hudsonian chickadee																			tv	c		tv	c	
Golden-crowned kinglet				tv	c	Apr. 19							Nov. 1		tv	c			tv			tv		
Ruby-crowned kinglet				tv	c			tv	c	Apr. 10			Oct		tv	fc								
Blue-gray gnatcatcher								tv	fc	Apr. 30														
Townsend solitaire																						sr	c	yes
Wood thrush			yes	sr									Oct	June 1, 15	sr				sr			sr	c	yes
Wilson thrush			May 25	sr				sr	c	Apr. 28, May 5, 12			Aug. 30, Sept. 1	June 13	sr	c		yes	sr					
Gray-cheeked thrush								sr	c	May 1, 8, 16														
Bicknell thrush																								
Olive-backed thrush																			tv			tv		
Hermit thrush		Nov. 1, 8		tv, sr	c, local										tv				tv			tv		
American robin				sr	fc			tv		May 8					tv	c	Apr 27		sr	ab	yes	sr	ab	yes
Varied thrush			yes	sr	ab	Mar. 28	yes	tv	c	Apr. 15	May 13		Nov. 1, 26	Apr. 10, 26	sr	ab	Mar. 8	yes						
Wheatear								sr	ab	Mar. 7, 15														
Bluebird			yes	sr	fc		yes	sr	c	Mar. 2, 15, 30			Nov. 1, 10	Apr. 8, May 4	sr	c	Mar. 11	yes	sr	c	yes	sr	fc	yes

SPECIES RECORDED	SENECA			STEUBEN							
	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Breeds	Resident or transient	Common or rare	Arrives from south
Rose-breasted grosbeak	sr		yes	sr	fc	May 7		yes	sr, tv	unc, fc	May 2, 4, 10
Blue grosbeak									av		May '43
Indigo bunting	sr	c	yes	sr	c	May 9, 16		yes	tv, sr	c	May 10, 17, 30
Painted bunting									av		
Dickcissel	sr, 1875								tv	rare	May '75
Lark bunting									av	twice	
Louisiana tanager											
Scarlet tanager	sr			sr	c	May 9		yes	sr	c	May 9, 11, 17
Summer tanager									av	8 records	Apr. 6, 11, May 14
Purple martin	sr	unc		sr	unc				sr	c	Apr. 3, 13, 29
Cliff swallow	sr			sr	ab			yes	sr	fc	Apr. 23, 28
Barn swallow	sr	c	yes	sr	c	Apr. 27		yes	sr	ab	Apr. 9, 11, 23
Tree swallow	tv, sr	ab, oc		sr	c			yes	tv, sr	ab, c	Feb. 16, Mar. 21, 3
Bank swallow	sr	c	yes	sr				yes	sr	ab	Apr. 9, 14, May 18
Rough-winged swallow	sr		yes						sr	fc	Apr. 19, 27
Bohemian waxwing									av		
Cedar waxwing	sr, res	c, oc	yes	sr	c			yes	sr, res	c, irreg, oc	Feb. 4, Mar. 11, Ap
Northern shrike	wv	unc		wv	unc				wv	unc	
Migrant shrike	sr	fc	yes						tv	rare	
Red-eyed vireo	sr	ab	yes	sr	ab	May 8		yes	sr	ab	May 5, 11, 26
Philadelphia vireo				tv	rare	May 3			tv	unc	May 21
Warbling vireo	sr	c	yes	sr	c			yes	sr	unc	May 3, 10, 23
Yellow-throated vireo	sr			sr	fc	May 7, 21		yes	sr	c	May 1, 9, 17
Blue-headed vireo	tv			tv	unc	Apr. 30			tv	fc	Apr. 24, 30, May 1
Plumbeous vireo											
White-eyed vireo									sr	c	Apr. 29, May 5, 9
Black and white warbler	tv, sr	c, oc		tv, sr	c, fc	Apr. 30		yes	sr	c	Apr. 23, 28, May 4
Prothonotary warbler									av		Apr. '88
Worm-eating warbler									sr, tv	rare, rare	May 4, 16
Blue-winged warbler									sr	unc	May 4, 11, 24
Golden-winged warbler				tv	rare				tv	rare	May 10, 11, 14
Lawrence warbler									av		8 May '02
Brewster warbler											
Nashville warbler	tv			tv	unc				tv	fc, irreg	May 9, 13
Orange-crowned warbler									tv	rare	
Tennessee warbler				tv	rare				tv	irreg, fall	May 8
Southern parula warbler										unc	
Northern parula warbler	tv								sr, tv	local, c	Apr. 29, May 7, 19
Cape May warbler				tv	rare				tv	rare	May 11
Yellow warbler	sr	ab	yes	sr	ab	Apr. 30, May 3		yes	sr	c	Apr. 23, May 2, 6
Black-throated blue warbler	tv	c		tv, sr	c, fc	May 4, 10		yes	tv	c	May 4, 12, 15
Myrtle warbler	tv	ab		tv	ab	Apr. 23, 30	May 18		tv, wv	ab, c	Apr. 10, 20, 27
Magnolia warbler	tv	c		tv	c	May 7			tv	fc	May 11, 12, 14
Cerulean warbler	sr	local, May 10	yes								
Chestnut-sided warbler	tv	c		tv, sr	fc			yes	tv, sr	c, oc	May 5, 7, 10
Bay-breasted warbler	tv	unc		tv	unc				tv	rare	May 16
Black poll warbler	tv	c		tv	c				tv	c	May 9, 15, 18
Blackburnian warbler	tv	c		tv	c	May 7			tv	unc	May 10, 12, 19
Yellow-throated warbler											
Black-throated green warbler	tv, sr	c, oc		sr	c	Apr. 30		yes	tv, sr	c, local	May 4, 6, 16
Pine warbler				tv	c	Apr. 23			tv, sr	c, fc	Apr. 3, 7, May 6
Palm warbler	tv								tv	rare	
Yellow palm warbler									tv	fc	Apr. 14, 16, 24
Prairie warbler									sr	c	May 4, 6
Ovenbird	sr	c	yes	sr	c			yes	sr	c	Apr. 25, May 3, 12
Water-thrush	tv, sr	fc, oc		tv	unc				tv	c	May 2, 8, 12
Grinnell water-thrush									tv	once	
Louisiana water-thrush	sr	local	yes						tv	rare	Apr. 12, 13
Kentucky warbler									sr	rare	May 18
Connecticut warbler				tv	rare	Apr. 30			tv	irreg, fall	
Mourning warbler				tv, sr	unc, oc			yes	tv	rare	29 May '93
Northern yellow-throat	sr	c	yes	sr	c	May 3, 7, 10		yes	sr	ab	May 2, 5, 11
Yellow-breasted chat				sr	unc	May 18		yes	sr	c	May 3, 11, 19
Hooded warbler	tv								tv	rare	Apr. 30
Wilson warbler				tv		May 5	May 20		tv	unc	May 13, 19
Canadian warbler				tv, sr	c, fc	May 9		yes	tv	fc	May 10, 12, 18
American redstart	sr	c	yes	sr	c	May 2, 10		yes	sr	c	May 3, 6, 15
American pipit	tv								tv, wv	ab, oc	Mar. 12, 19, 29
Mockingbird									av		May 10, 29
Catbird	sr		yes	sr	ab			yes	sr, res	ab, rare	May 1, 5, 10
Brown thrasher	sr			sr	c	Apr. 23		yes	sr, res	c, rare	Apr. 2, 24, May 1
Carolina wren									res	local	
House wren	sr		yes	sr	fc	May 5		yes	sr	c	Mar. 29, Apr. 21, M
Winter wren	tv	fc		tv, res	fc, oc	Apr.			tv, wv	fc	
Short-billed marsh wren											
Long-billed marsh wren	sr	c	yes						sr, res	c, rare	May 3, 12, 14
Brown creeper	tv	c		tv	c	Mar. 30	Apr. 27		tv, wv	ab, fc	
White-breasted nuthatch	res	c	yes	res	fc			yes	tv, res	fc, oc	
Red-breasted nuthatch	tv	fc		tv	oc				tv, wv	irreg, oc	
Brown-headed nuthatch											
Tufted titmouse									res	rare	
Chickadee	res	c	yes	res	c			yes	res	c	
Carolina chickadee											
Hudsonian chickadee											
Golden-crowned kinglet	tv, wv	c, oc		tv, wv	ab, oc	Apr. 5	May 3		wv	c	
Ruby-crowned kinglet	tv	fc		tv	c	Apr. 27			tv	c	Apr. 4, 12, 20
Blue-gray gnatcatcher										rare	July 13
Townsend solitaire									av	once	
Wood thrush	sr			sr	fc	May 7, 13		yes	sr	c, local	Apr. 13, May 2, 4
Wilson thrush	sr	c		sr	c	Apr. 28, May 5		yes	tv, sr	fc, oc	May 1, 6, 16
Gray-cheeked thrush	tv	fc							tv	fc	May 18, 19, 21
Bicknell thrush									tv	unc	
Olive-backed thrush	tv	c		tv					tv	fc	May 8, 11, 17
Hermit thrush	tv	c		tv	c	Apr. 23			tv, res	c, rare	Apr. 6, 10, 20
American robin	sr, res	ab, oc	yes	sr	ab			yes	sr, res	ab, oc	Feb. 7, 19, Mar. 19
Varied thrush									av	once	
Wheatear	av	Sept. '72							av	3 records	
Bluebird	sr	c	yes	sr	c	Mar. 15		yes	sr, res	c, oc	Feb. 6, 22, Mar. 16

				SULLIVAN			TIOGA		
Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Arrives from south
		Sept. 1, 13, Oct. 2	May 25	sr			sr, tv	oc, c	
		Sept. 20, 23, Oct. 11	June 1	sr			sr	fc	
	29 Sept., 25 Aug. '91	Dec. '85							
	Sept. 4, 11	10 Oct. '88							
		Sept. 25, Oct. 11, 18	June 6, 15	sr			sr	c	
		Sept. 12, 20	May 15	sr			sr	rare	
		Aug. 15, Sept., Oct. 11	yes	sr			sr	oc	
		Sept. 17, 22, Oct. 15	May 26, June 12, 28	sr	c	yes	sr	ab	
23	Aug. 8, 9, Sept. 25, '91	Oct. 19, Nov. 15, 24	May 3, June 4, 10	tv, sr	c, oc		tv, sr	c, unc	
		Aug. 22, Sept. 14	May 25	sr			sr	ab	
		Aug	June 1, 12						
'89									
		Oct. 4, Nov. 1, 18	June 27, July 7	sr	c	yes	sr, res	c, oc	
, 25, Apr. 5	Nov. 6, 13, Dec. 14			wv	oc		wv	rare	
	Aug. 28, Sept. 19	Nov. 21					sr	rare	
		Sept. 15, Oct. 11, 31	June 4, 13, 15	sr	c	yes	sr	c	
	Sept. 17, 18, 25								
		Sept. 3, 4	yes	sr			sr	c	
		Sept. 17, 20, 23	June 2	sr			sr	c	
	Sept. 21, 23	Oct. 3, 7, 11					tv, sr	oc, rare	
		Sept. 20, 30	June 6, 13				sr	rare	
		Aug. 25, Sept. 1, Oct. 24	May 20, 27, June 3	sr			tv, sr	c, oc	
	26 Aug. '86								
		Sept. 21	June 5					rare	
			May 15, June 10						
		Aug. 15							
, 24	Sept. 10, 18, 22	Oct. 15		tv			tv	unc	
	Sept. 1, 20	Sept. 23, Oct. 3						rare	
		Sept. 20, Oct. 11, 20	May 30, June 1, 10				tv, sr	c, oc	
	Sept. 12, 15								
		Sept. 17, 20	May 30, June 20	sr	c	yes	sr	c	
, 25	Sept. 1, 17	Oct. 11, 13, Nov. 30		tv			tv, sr	c, oc	
9, 16	Oct. 9, 11, 25	Nov. 5, 27, Dec. 10					tv	ab	Mar. 30, Apr. 28
, 23	Sept. 1, 18, 23	Oct. 11, 14		tv			tv	c	May 10
, 23		Sept. 5, 18, 21	yes	tv, sr	c		tv, sr	c, oc	
, 29	Sept. 5, 12, 18	Oct. 6		tv			tv	rare	
, 30	Sept. 1, 18, 25	Oct. 20, 25, 30		tv					
, 30	Sept. 1, 23, 28	Oct. 14		tv			tv, sr	c, oc	
		Oct. 2, 11, 14	June 5	tv, sr			tv, sr	c, unc	May 1
		Oct. 15, Nov. 7	May 4				tv	c	Apr. 16
	Sept. 7, 23	Oct. 11							
6	Sept. 21, Oct. 5	Oct. 15, 18, 22							
		Aug. 27, Sept. 13, 19	June 4						
		Sept. 20, 23, Oct. 11	May 30, June 13	sr	c	yes	sr	c	May 2
, 20, 25	Aug. 7, 19, Sept. 3	Sept. 26		tv			tv, sr	fc, oc	May 7
		19 Aug. '88	once						
	Sept. 12, 17, 23	Oct. 2, 7, 11							
	Sept. 11								
		Oct. 14, 23	May 25, June 6, July 9	sr		yes	sr	c	
		Aug. 24, Sept. 18	May 25, June 3	sr			sr		
	Sept. 1	Sept. 24							
June 13.–	Aug. 22, Sept. 21	Oct. 6					tv	unc	
, 23	Aug. 21	Sept. 19		tv			tv	c	
		Sept. 18, 23	May 24, June 8	sr		yes	sr	c	
, May 3, 27	Sept. 6, 14, 30	Nov. 7, 16, 30							
		Oct. 9, 11, 20	May 18, 30, June 17	sr	c	yes	sr	c	
		Sept. 21, Oct. 13, 21	May 23, June 24	sr		yes	sr	c	
			yes, 1883–1907						
		Oct. 1	May 20, June 24	sr		yes	sr	c	
ay 5	Sept. 29, Oct. 11, 16	Dec.		tv			tv, res	fc, oc	
		Sept. 21, Oct. 10, 11	June 5, 23	sr			sr	oc	
, 20	Oct. 3, 12, 21			tv			wv, sr	c, rare	
	Oct. 18, 24, Nov. 1		rarely ?	res			res	fc	
15	Oct. 11, Dec. 10						tv, wv	oc	May 1
			May 5, 20, 30	res	c	yes	res	c	
, May 2	Sept. 24, Oct. 12, Nov. 5			tv	c		wv	fc	
15	Sept. 21, Oct. 5, 12	Oct. 12, 21, Nov. 11		tv			tv		
	Sept. 2	22 Sept. '96					sr	rare	
	25 Nov. '05								
		Sept. 18, 26, Oct. 4	May 28, June 2, 27	sr			sr	fc	May 7
	Sept. 18, 23, 30	Oct. 3, 15, 19	May 21	sr			sr	c	May 5
	Sept. 18, 23, 30	Oct. 11					tv	rare	
	Sept. 18, 23	Oct. 12, 23							
	Sept. 17, 27, 30	Oct. 11, 17		tv			tv	unc	
, 14, 20	Oct. 11, 18, 25	Nov. 11, 12	May 16	tv			tv	c	
		Nov. 15, Dec. 15	May 4, June 5, July 17	sr	c	yes	sr, res	c, oc	Mar. 18
	20 Dec. '89, 19 Nov. '05								
		Nov. 5, 15	Apr. 25, May 26, June 16	sr	c	yes	sr	c	Apr. 2

SPECIES RECORDED	SENECA			STEUBEN					SUFFOLK								SULLIVAN			TIOGA		
	Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds		Resident or transient	Common or rare	Breeds	Resident or transient	Common or rare	Arrives from south
Rose-breasted grosbeak	sr		yes	sr	fc	May 7		yes	sr, tv	unc, fc	May 2, 4, 10			Sept. 1, 13, Oct. 2	May 25		sr			sr, tv	oc, c	
Blue grosbeak									av		May '43											
Indigo bunting	sr	c	yes	sr	c	May 9, 10		yes	tv, sr	c	May 10, 17, 30			Sept. 20, 23, Oct. 11	June 1		sr			sr	fc	
Painted bunting									av					Dec '85								
Dickcissel	sr, 1875								tv	rare	May '75		29 Sept., 25 Aug. '91	10 Oct. '88								
Lark bunting									av	twice			Sept. 4, 11									
Louisiana tanager																						
Scarlet tanager	sr			sr	c	May 9		yes	sr	c	May 9, 11, 17			Sept. 25, Oct. 11, 18	June 6, 15		sr			sr	c	
Summer tanager									av	8 records	Apr. 6, 11, May 14											
Purple martin	sr	unc		sr	unc				sr	c	Apr. 3, 13, 29			Sept. 12, 20	May 15		sr			sr	rare	
Cliff swallow	sr			sr	ab			yes	sr	fc	Apr. 23, 28			Aug. 15, Sept., Oct. 11	yes		sr			sr	fc	
Barn swallow	sr	c	yes	sr	c	Apr. 27		yes	sr	ab	Apr. 9, 11, 23			Sept. 17, 22, Oct. 25	May 26, June 12, 28		sr	c	yes	sr	ab	
Tree swallow	tv, sr	ab, oc		sr	c			yes	tv, sr	ab, c	Feb. 16, Mar. 21, 30	May 9, 23	Aug. 8, 9, Sept. 25, '91	Oct. 19, Nov. 15, 24	May 3, June 4, 10		tv, sr	c, oc		tv, sr	c, unc	
Bank swallow	sr	c	yes	sr				yes	sr	ab	Apr. 9, 14, May 28			Aug. 22, Sept. 14	May 25		sr			sr	ab	
Rough-winged swallow	sr		yes						sr	fc	Apr. 19, 27			Aug	June 1, 12							
Bohemian waxwing									av			18 Apr. '89										
Cedar waxwing	sr, res	c, oc	yes	sr	c			yes	sr, res	c, irreg, oc	Feb. 4, Mar. 11, Apr. 10			Oct. 4, Nov. 1, 18	June 27, July 7		sr	c	yes	r, res	c, oc	
Northern shrike	wv	unc		wv	unc				wv	unc		Mar. 21, 25, Apr. 5	Nov. 6, 13, Dec. 14				wv	oc		wv	rare	
Migrant shrike	sr	fc	yes						tv	rare			Aug. 28, Sept. 19	Nov. 21						sr	rare	
Red-eyed vireo	sr	ab	yes	sr	ab	May 8		yes	sr	ab	May 5, 11, 26			Sept. 15, Oct. 11, 31	June 4, 13, 15		sr	c	yes	sr		
Philadelphia vireo				tv	rare	May 3			tv	unc	May 21		Sept. 17, 18, 25									
Warbling vireo	sr	c	yes	sr	c			yes	sr	unc	May 3, 10, 23			Sept. 3, 4	yes		sr			sr	c	
Yellow-throated vireo	sr			sr	fc	May 7, 21		yes	sr	c	May 1, 9, 17			Sept. 17, 20, 23	June 2		sr			sr	c	
Blue-headed vireo	tv			tv	unc	Apr. 30			tv	fc	Apr. 24, 30, May 1		Sept. 21, 23	Oct. 3, 7, 11						tv, sr	c, rare	
Plumbeous vireo																						
White-eyed vireo									sr		Apr. 29, May 5, 9			Sept. 20, 30	June 6, 13					sr	rare	
Black and white warbler	tv, sr	c, oc		tv, sr	c, fc	Apr. 30		yes	sr	c	Apr. 23, 28, May 4			Aug. 25, Sept. 1, Oct. 24	May 20, 27, June 3		sr			tv, sr	c, oc	
Prothonotary warbler									av		Apr. '88		26 Aug. '86									
Worm-eating warbler									sr, tv	rare, rare	May 4, 16			Sept. 21	June 5						rare	
Blue-winged warbler									sr	unc	May 4, 11, 24				May 15, June 10							
Golden-winged warbler				tv	rare				tv	rare	May 10, 11, 14			Aug. 15								
Lawrence warbler									av		8 May '02											
Brewster warbler																						
Nashville warbler	tv			tv	unc				tv	fc, irreg	May 9, 13	May 15, 24	Sept. 10, 18, 22	Oct. 15			tv			tv	unc	
Orange-crowned warbler									tv	rare												
Tennessee warbler				tv	rare				tv	irreg, fall	May 8		Sept. 1, 20	Sept. 23, Oct. 3							rare	
Southern parula warbler										unc										tv, sr	c, oc	
Northern parula warbler	tv								sr, tv	local, c	Apr. 29, May 7, 19			Sept. 20, Oct. 11, 20	May 30, June 1, 10							
Cape May warbler				tv	rare				tv	rare	May 11	May 20	Sept. 12, 15							sr	c	
Yellow warbler	sr	ab	yes	sr	ab	Apr. 30, May 3		yes	sr	c	Apr. 23, May 2, 6			Sept. 17, 20	May 30, June 20		sr	c	yes	tv, sr	c, oc	
Black-throated blue warbler	tv	c		tv, sr	c, fc	May 4, 10		yes	tv	c	May 4, 12, 15	May 19, 25	Sept. 1, 17	Oct. 11, 13, Nov. 30			tv			tv	ab	Mar. 30, Apr. 28
Myrtle warbler	tv	ab		tv	ab	Apr. 23, 30	May 18		tv, wv	ab, c	Apr. 10, 20, 27	May 2, 9, 16	Oct 9, 11, 25	Nov. 5, 27, Dec. 10						tv	c	May 10
Magnolia warbler	tv	c		tv	c	May 7			tv	fc	May 11, 12, 14	May 19, 23	Sept. 1, 18, 23	Oct. 11, 14			tv					
Cerulean warbler	sr	local, May 10	yes																			
Chestnut-sided warbler	tv	c		tv, sr	fc			yes	tv, sr	c, oc	May 5, 7, 10	May 19, 23		Sept. 5, 18, 21	yes		tv, sr	c		tv, sr	c, oc	
Bay-breasted warbler	tv	unc		tv	unc				tv	rare	May 16	May 25, 29	Sept. 5, 12, 18	Oct. 6			tv			tv	rare	
Black-poll warbler	tv	c		tv	c				tv	c	May 9, 15, 18	May 17, 30	Sept. 1, 18, 25	Oct. 20, 25, 30			tv					
Blackburnian warbler	tv	c		tv	c	May 7			tv	unc	May 10, 12, 19	May 27, 30	Sept. 1, 23, 28	Oct. 14						tv, sr	c, oc	
Yellow-throated warbler																						
Black-throated green warbler	tv, sr	c, oc		sr	c	Apr. 30		yes	tv, sr	c, local	May 4, 6, 16			Oct. 2, 11, 14	June 5		tv, sr			tv, sr	c, unc	May 1
Pine warbler				tv	c	Apr. 23			tv, sr	c, fc	Apr. 3, 7, May 6			Oct. 15, Nov. 7	May 4					tv	c	Apr. 16
Palm warbler	tv								tv	rare			Sept. 7, 23	Oct. 11								
Yellow palm warbler									tv	fc		May 1, 6	Sept. 21, Oct. 5	Oct. 15, 18, 22								
Prairie warbler																						
Ovenbird	sr	c	yes	sr	c				sr	c	May 4, 6			Aug. 27, Sept. 11, 19	June 4		sr	c	yes	sr	c	May 9
Water-thrush	tv, sr	fc, oc		tv	unc			yes	sr	c	Apr. 25, May 3, 12			Sept. 20, 23, Oct. 11	May 30, June 13		tv			tv, sr	fc, oc	May 7
Grinnell water-thrush									tv	c	May 2, 8, 12	May 15, 20, 25	Aug. 7, 19, Sept. 3	Sept. 26								
Louisiana water-thrush	sr	local	yes						tv	once												
Kentucky warbler									tv	rare	Apr. 12, 13											
Connecticut warbler									sr	rare	May 18			10 Aug. '88	once							
Mourning warbler				tv	rare	Apr. 30			tv	irreg, fall			Sept. 12, 17, 23	Oct. 2, 7, 11								
Northern yellow-throat	sr	c	yes	tv, sr	unc, oc			yes	tv	rare	29 May '93		Sept. 11				sr		yes	sr	c	
Yellow-breasted chat				sr	c	May 3, 7, 10		yes	sr	ab	May 2, 5, 11			Oct. 14, 23	May 25, June 6, July 9		sr			sr		
Hooded warbler	tv			sr	unc	May 18		yes	sr	c	May 3, 11, 19			Aug. 24, Sept. 18	May 25, June 3							
Wilson warbler									tv	rare	Apr. 30	May 16	Sept. 1	Sept. 24						tv	unc	
Canadian warbler				tv		May 5	May 20		tv	unc	May 13, 19	May 25, June 13	Aug. 22, Sept. 21	Oct. 6			tv			tv		
American redstart	sr	c	yes	tv, sr	c, fc	May 9		yes	tv	fc	May 10, 12, 18	May 20, 23	Aug. 21	Sept. 19			sr		yes	r		
American pipit	tv			sr	c	May 2, 10		yes	sr	c	May 3, 6, 15			Sept. 18, 33	May 24, June 8							
Mockingbird									tv, wv	ab, oc	Mar. 12, 19, 29	Apr. 19, May 3, 27	Sept. 6, 14, 30	Nov. 7, 16, 30								
Catbird	sr		yes	sr	ab				av		May 19, 29						sr	c	yes	sr	c	
Brown thrasher	sr			sr	c	Apr. 23		yes	sr, res	ab, rare	May 1, 5, 10			Oct. 9, 11, 20	May 18, 30, June 17		sr		yes	sr		
Carolina wren								yes	sr, res	c, rare	Apr. 2, 24, May 1			Sept. 21, Oct. 13, 21	May 21, June 24							
House wren	sr		yes	sr	fc	May 5			res	local					yes, 1884–1907		sr		yes	sr		
Winter wren	tv	fc		tv, res	fc oc	Apr		yes	sr	c	Mar. 29, Apr. 21, May 10			Oct 1	May 20, June 24		tv			tv, res		
Short-billed marsh wren									tv, wv	fc		Apr., May 5	Sept. 29, Oct. 11, 16	Dec							oc	
Long-billed marsh wren	sr	c	yes														sr			wv, sr	rare	
Brown creeper	tv	c		tv	c	Mar. 30	Apr. 27		sr, res	c, rare	May 3, 12, 14	Apr. 11, 20	Oct. 3, 12, 21	Sept. 21, Oct. 10, 11	June 5, 23		tv				fc	
White-breasted nuthatch	res	c	yes	res	fc			yes	tv, wv	ab, fc		Mar. 20	Oct. 18, 24, Nov. 1		rarely ?		res			tv, wv	c	May 1
Red-breasted nuthatch	tv	fc		tv	oc				tv, res	fc, cc		May 1, 15	Oct. 11, Dec. 10									
Brown-headed nuthatch									tv, wv	irreg, oc												
Tufted titmouse																						
Chickadee	res	c	yes	res	c				res	rare					May 5, 20, 30		res		yes	res		
Carolina chickadee								yes	res	c												
Hudsonian chickadee																	tv			tv		
Golden-crowned kinglet	tv, wv	c, oc		tv, wv	ab, oc	Apr. 5	May 3		wv	c		Apr. 15, May 2	Sept. 24, Oct. 12, Nov. 5				tv			sr	rare	
Ruby-crowned kinglet	tv	fc		tv	c	Apr. 27			tv	c	Apr. 4, 12, 20	May 6, 15	Sept. 21, Oct. 5, 12	Oct. 12, 21, Nov. 11								
Blue-gray gnatcatcher										rare	July 13		Sept. 2	22 Sept. '90						sr	fc	May 7
Townsend's solitaire									av	once			25 Nov. '05		May 28, June 2, 27		sr			sr		May 5
Wood thrush	sr			sr	fc	May 7, 13		yes	sr	c, local	Apr. 13, May 2, 4		Sept. 18, 21, 30	Sept. 18, 26, Oct. 4	May 21					tv	rare	
Wilson thrush	sr	c		sr	c	Apr. 28, May 5		yes	tv, sr	fc, oc	May 1, 6, 10	May 21	Sept. 18, 23, 30	Oct. 3, 15, 10								
Gray-cheeked thrush	tv	fc							tv	fc	May 18, 19, 21	May 30	Sept. 18, 23	Oct. 11			tv			tv	unc	
Bicknell thrush									tv	unc			Sept. 17, 27, 10	Oct. 12, 23			tv			tv	c	
Olive-backed thrush	tv	c		tv	c	Apr. 23			tv	fc	May 8, 11, 17	May 10	Oct. 11, 18, 25	Oct. 11, 17	May 10					sr, res	c, oc	Mar 18
Hermit thrush	tv	c		tv					tv, res	c, rare	Apr. 6, 10, 20	May 12, 14, 20		Nov. 11, 12	May 4, June 5, July 17		sr	c	yes			
American robin	sr, res	ab, oc	yes	sr	ab			yes	sr, res	ab, oc	Feb. 7, 19, Mar. 10		20 Dec. '89, 19 Nov. '05	Nov. 15, Dec. 15								
Varied thrush									av	once												Apr. 2
Wheatear	av	Sept. '72							av	3 records							sr	c	yes	sr	c	
Bluebird	sr	c	yes	sr		Mar. 15		yes	sr, res	c, oc	Feb. 6, 22, Mar. 16			Nov 5, 15	Apr. 25, May 26, June 16							

SPECIES RECORDED	TIOGA (*continued*)		TOMPKINS						
	Leaves for north	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Br
Rose-breasted grosbeak			sr	c	May 3, 4, 9				yes
Blue grosbeak									
Indigo bunting		yes	sr	c	May 9, 11, 16				yes
Painted bunting									
Dickcissel									
Lark bunting									
Louisiana tanager									
Scarlet tanager		yes	sr	fc	May 3, 11				yes
Summer tanager									
Purple martin			sr	irreg					yes
Cliff swallow			sr	fc	Apr. 20				yes
Barn swallow		yes	sr	c	Apr. 5, 13, 17				yes
Tree swallow		yes	tv, sr	fc, rare	Mar. 30				yes
Bank swallow		yes	sr	ab	Apr. 24, 27, 30				yes
Rough-winged swallow			sr	unc	Apr. 22, 30			Aug. 8	yes
Bohemian waxwing									
Cedar waxwing		yes	sr, res	c, oc					yes
Northern shrike			wv	unc					
Migrant shrike			sr	unc	Mar. 17, 26, Apr. 13				yes
Red-eyed vireo	Sept. 10	yes	sr	c	Apr. 29, May 5, 8				yes
Philadelphia vireo			tv	rare	May 14, 16	May 18			
Warbling vireo		yes	sr	c	Apr. 30, May 2, 4				yes
Yellow-throated vireo		yes	sr	c	Apr. 30, May 3, 7				yes
Blue-headed vireo		May 27	tv, sr	c, oc	Apr. 25, 30, May 3	May 15, 28			
Plumbeous vireo									
White-eyed vireo									
Black and white warbler		yes	tv, sr	c, fc	Apr. 26, 29, May 3	May 17, 30			yes
Prothonotary warbler									
Worm-eating warbler									
Blue-winged warbler									
Golden-winged warbler									
Lawrence warbler									
Brewster warbler									
Nashville warbler	June 10		tv	fc	May 1, 3, 10				
Orange-crowned warbler			tv	unc			Oct. 6	Oct. 12	
Tennessee warbler			tv	unc	May 11, 14	May 18, 30			
Southern parula warbler									
Northern parula warbler			tv	c	Apr. 30, May 3, 7	May 15			
Cape May warbler			tv	rare	May 10, 13, 14	May 16, 18			
Yellow warbler		yes	sr	c	Apr. 24, 29, May 3				yes
Black-throated blue warbler		yes	tv, sr	c, oc	Apr. 29, May 3, 5	May 14, 20			yes
Myrtle warbler	May 15		tv	ab	Apr. 14, 21, 29	May 14, 21			
Magnolia warbler			tv	c	Apr. 27, 30, May 10	May 18, 21	Aug. 23	Sept. 6, 18	
Cerulean warbler			tv	rare	May 2, 10, 13	May 17			
Chestnut-sided warbler			sr	fc	May 3, 7, 9				
Bay-breasted warbler			tv	fc	May 7, 11, 13	May 15, 22			
Black-poll warbler			tv	c	May 10, 16, 17	May 22			
Blackburnian warbler			tv, sr	c, local	May 1, 3, 7	May 21			yes
Yellow-throated warbler									
Black-throated green warbler			tv, sr	c, oc	Apr. 30, May 3, 5	May 13, 18			yes
Pine warbler			tv, sr	c, local	Apr. 5, 29				yes
Palm warbler			tv	unc	May 1				
Yellow palm warbler			tv						
Prairie warbler									
Ovenbird		yes	sr	ab	Apr. 29, May 3, 7				yes
Water-thrush		June 17	tv, sr	c, local	Apr. 28, May 3	May 22			
Grinnell water-thrush									
Louisiana water-thrush			sr	c	Apr. 14, 16, 22			Aug. 8	yes
Kentucky warbler									
Connecticut warbler			tv	oc, fall					
Mourning warbler			tv	fc	May 7, 10, 14	May 22			
Northern yellow-throat		yes	sr	c	Apr. 30, May 7, 13				yes
Yellow-breasted chat			sr	unc	Apr. 30, May 3, 11			July 28	yes, Ju
Hooded warbler			tv	rare	May 4, 7, 14	May 30			
Wilson warbler			tv	fc	May 10, 13	May 17, 30			
Canadian warbler			tv, sr	c, oc	May 5, 10	May 19			yes
American redstart		yes	sr	c	Apr. 29, May 3, 5				yes
American pipit			tv	fc	Apr. 1	Apr. 29	Oct. 5	Oct. 30	
Mockingbird									
Catbird		yes	sr	c	May 3, 5, 7				yes
Brown thrasher		yes	sr	unc	Apr. 29				
Carolina wren			res	oc					yes, Ju
House wren		yes	sr	c	Apr. 26, May 4				
Winter wren			tv, res	fc, oc	Mar. 28, Apr. 5	Apr. 23			local, J
Short-billed marsh wren				rare					
Long-billed marsh wren		yes	sr, wv	c, rare	Apr. 18, May 7, 12			Oct. 22	yes
Brown creeper		yes	tv, wv	c, oc		May 3, 6	Sept. 18		
White-breasted nuthatch		yes	res	c					Apr. 2
Red-breasted nuthatch			tv, wv	c, oc	Apr. 10, 23	May 8, 30	Oct. 6		
Brown-headed nuthatch									
Tufted titmouse									
Chickadee		yes	res	c					May 5.
Carolina chickadee									
Hudsonian chickadee									
Golden-crowned kinglet			tv, wv	c, oc		May 5, 11	Sept. 28, Oct		
Ruby-crowned kinglet			tv	c	Apr. 19, 21, 27	May 10			
Blue-gray gnatcatcher									
Townsend solitaire									
Wood thrush			sr	c	May 6, 11				yes
Wilson thrush			sr	c	Apr. 29, May 3, 8				yes
Gray-cheeked thrush			tv	unc	May 15, 16	May 22			
Bicknell thrush									
Olive-backed thrush			tv	c	May 7, 14	May 22	Sept. 3		
Hermit thrush			tv, sr	c, local	Mar. 26, 31, Apr. 20				yes
American robin		yes	sr, res	ab, oc	Mar. 7, 12, 22				yes
Varied thrush									
Wheatear									
Bluebird		yes	sr	c	Feb. 24, Mar. 6, 9				yes

ULSTER.					WARREN				
esident or nsient	Common or rare	Arrives from south	Leaves for north	Breeds	Resident or transient	Common or rare	Arrives from south	Departs for south	Breeds
	fc			yes	sr	fc			yes
	c			yes	sr	fc			yes
	5 June '96								
				yes	sr	c			yes
				yes	sr				
				yes	sr	c			
	c			yes	sr	ab			yes
	c				sr	fc			
	c			yes	sr	fc			yes
	fc			June 27					
	c			yes	sr	fc			yes
					wv				
	c			yes	sr	ab			yes
	unc				tv	fc		Sept. 22	
	c			yes	sr	fc			yes
	c			yes	sr	fc			yes
	—, local			yes	sr				yes
				yes					
				yes	sr	fc			yes
	c				tv, sr	c, unc			yes
	c				tv, sr	c, oc			yes
	rare				tv	unc	May 27	Sept. 15	
	c			yes	sr	c			yes
	c, local			yes	tv, sr	c, oc			
	c, local			yes	tv	ab			
	c, local			yes	tv, sr	c, oc			
	rare	17 May '75							
	c			yes	sr	c			yes
					tv				
	c, local			yes	tv	c			
	c, local			yes	tv, sr	c, unc			
	c	May 5		yes	tv, sr	c			
	oc				sr		June 22		
					tv				
	c			yes	sr	c			yes
	fc, local				sr				
	c			yes	sr	local	May 8, 13, 16		yes
	—, local			July	sr	unc			
	c			yes	sr	fc			yes
					tv				
	c, local			yes	sr				
	c			yes	sr	c			yes
					tv	c			
	c			yes	sr	c			yes
				yes	sr	unc			yes
				yes	sr	oc			yes
wv	local, c, oc	May	Oct.	yes	tv, sr	c, unc			yes
	local			yes	sr	local			
	c, oc			yes	tv, sr	c			
				yes	res	fc			yes
	irreg, local			yes	tv, sr	c, oc			
	c			yes	res	c			yes
	c, local				tv, res	c, oc			
	c				tv				
	c			yes	sr	fc			
	c			yes	sr	c			yes
					tv				
	local			June					
	c, local			yes	tv, sr	c			
	c, local			yes	sr	c			yes
	ab, oc			yes	sr	c			yes
	c			yes	sr	c			yes

SPECIES RECORDED	TIOGA (continued)		TOMPKINS							ULSTER.					WARREN				
	Leaves for north	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Leaves for north	Breeds	Resident or transient	Common or rare	Arrives from south	Departs for south	Breeds
Rose-breasted grosbeak			sr	c	May 3, 4, 9				yes	sr	fc			yes	sr	fc			yes
Blue grosbeak																			
Indigo bunting		yes	sr	c	May 9, 11, 16				yes	sr	c			yes	sr	fc			yes
Painted bunting																			
Dickcissel										av	5 June '96								
Lark bunting																			
Louisiana tanager																			
Scarlet tanager		yes	sr	fc	May 3, 11				yes	sr				yes	sr	c			yes
Summer tanager																			
Purple martin			sr	irreg					yes	sr				yes	sr				
Cliff swallow			sr	fc	Apr. 20				yes	sr				yes	sr	c			
Barn swallow		yes	sr	c	Apr. 5, 13, 17				yes	sr	c			yes	sr	ab			yes
Tree swallow		yes	tv, sr	fc, rare	Mar. 30				yes	tv	c				sr	fc			yes
Bank swallow		yes	sr	ab	Apr. 24, 27, 30				yes	sr	c			yes	sr	fc			
Rough-winged swallow			sr	unc	Apr. 22, 30			Aug. 8	yes	sr	fc			June 27					
Bohemian waxwing																			
Cedar waxwing		yes	sr, res	c, oc					yes	res	c			yes	sr	fc			yes
Northern shrike			wv	unc						wv					wv				
Migrant shrike			sr	unc	Mar. 17, 26, Apr. 13				yes										
Red-eyed vireo	Sept. 10	yes	sr	c	Apr. 29, May 5, 8				yes	sr	c			yes	sr	ab		Sept. 22	yes
Philadelphia vireo			tv	rare	May 14, 16	May 18				tv	unc				tv	fc			yes
Warbling vireo		yes	sr	c	Apr. 30, May 2, 4				yes	sr	c			yes	sr	fc			yes
Yellow-throated vireo		yes	sr	c	Apr. 30, May 3, 7				yes	sr	c			yes	sr	fc			yes
Blue-headed vireo		May 27	tv, sr	c, oc	Apr. 25, 30, May 3	May 15, 28				tv, sr	—, local			yes	sr				
Plumbeous vireo																			
White-eyed vireo										sr				yes					yes
Black and white warbler		yes	tv, sr	c, fc	Apr. 26, 29, May 3	May 17, 30			yes	sr				yes	sr	fc			
Prothonotary warbler																			
Worm-eating warbler																			
Blue-winged warbler																			
Golden-winged warbler																			
Lawrence warbler																			
Brewster warbler																			
Nashville warbler	June 10		tv	fc	May 1, 3, 10					tv	c				tv, sr	c, unc			yes
Orange-crowned warbler			tv	unc			Oct. 6	Oct. 12											
Tennessee warbler			tv	unc	May 11, 14	May 18, 30													
Southern parula warbler																			yes
Northern parula warbler			tv	c	Apr. 30, May 3, 7	May 15				tv	c				tv, sr	c, oc	May 27	Sept. 15	
Cape May warbler			tv	rare	May 10, 13, 14	May 16, 18				tv	rare				tv	unc			yes
Yellow warbler		yes	sr	c	Apr. 24, 29, May 3				yes	sr	c			yes	sr	c			
Black-throated blue warbler		yes	tv, sr	c, oc	Apr. 29, May 3, 5	May 14, 20			yes	tv, sr	c, local			yes	tv, sr	c, oc			
Myrtle warbler	May 15		tv	ab	Apr. 14, 21, 29	May 14, 21				tv, sr	c, local			yes	tv	ab			
Magnolia warbler			tv	c	Apr. 27, 30, May 10	May 18, 21	Aug. 23	Sept. 6, 18		tv, sr	c, local			yes	tv, sr	c, oc			
Cerulean warbler			tv	rare	May 2, 10, 13	May 17					rare	17 May '75							yes
Chestnut-sided warbler			sr	fc	May 3, 7, 9					tv, sr	c			yes	sr	c			
Bay-breasted warbler			tv	fc	May 7, 11, 13	May 15, 22				tv					tv				
Black-poll warbler			tv	c	May 10, 16, 17	May 22				tv, sr	c, local			yes	tv	c			
Blackburnian warbler			tv, sr	c, local	May 1, 3, 7	May 21			yes	tv, sr	c, local			yes	tv, sr	c, unc			
Yellow-throated warbler																			
Black-throated green warbler			tv, sr	c, oc	Apr. 30, May 3, 5	May 13, 18			yes	tv, sr	c	May 5		yes	tv, sr	c	June 22		
Pine warbler			tv, sr	c, local	Apr. 5, 29				yes	tv	oc				sr				
Palm warbler			tv	unc	May 1										tv				
Yellow palm warbler			tv																
Prairie warbler																			yes
Ovenbird		yes	sr	ab	Apr. 29, May 3, 7				yes	sr	c			yes	sr	c			
Water thrush		June 17	tv, sr	c, local	Apr. 28, May 3	May 22				tv, sr	fc, local				sr				yes
Grinnell water-thrush																			
Louisiana water-thrush			sr	c	Apr. 14, 16, 22			Aug. 8	yes	sr	c			yes	sr	local	May 8, 13, 16		
Kentucky warbler																			
Connecticut warbler			tv	oc, fall											sr	unc			yes
Mourning warbler			tv	fc	May 7, 10, 14	May 22				tv, sr	—, local			July	sr	fc			
Northern yellow-throat		yes	r	c	Apr. 30, May 7, 13				yes	sr	c			yes	sr				
Yellow-breasted chat			sr	unc	Apr. 30, May 3, 11			July 28	yes, June 10										
Hooded warbler			tv	rare	May 4, 7, 14	May 30				tv					tv				
Wilson warbler			tv	fc	May 10, 13	May 17, 30			yes	tv, sr	c, local			yes	sr	c			yes
Canadian warbler			tv, sr	c, oc	May 5, 10	May 19			yes	sr	c			yes	tv	c			
American redstart		yes	sr	c	Apr. 29, May 3, 5				yes	tv									yes
American pipit			tv	fc	Apr. 1	Apr. 29	Oct. 5	Oct. 30											yes
Mockingbird										sr	c			yes	sr				
Catbird		yes	sr	c	May 3, 5, 7				yes	sr				yes	sr	unc			yes
Brown thrasher		yes	sr	unc	Apr. 29														yes
Carolina wren			res	oc					yes, June 21						sr				yes
House wren		yes	sr	c	Apr. 26, May 4					sr				yes	tv, sr	unc			
Winter wren			tv, res	fc, oc	Mar. 28, Apr. 5	Apr. 23			local, June 21	sr, tv, wv	local, c, oc	May	Oct.	yes					
Short-billed marsh wren				rare											sr	local			
Long-billed marsh wren		yes	sr, wv	c, rare	Apr. 18, May 7, 12			Oct. 22	yes	sr	local			yes	tv, sr	c			yes
Brown creeper		yes	tv, wv	c, oc		May 3, 6	Sept. 18			tv, res	c, oc			yes	res	fc			
White-breasted nuthatch		yes	res	c					Apr. 25	res				yes	tv, sr	c, oc			
Red-breasted nuthatch			tv, wv	c, oc	Apr. 10, 23	May 8, 30	Oct. 6			wv, sr	irreg, local			yes					
Brown-headed nuthatch																			yes
Tufted titmouse																c			
Chickadee		yes	res	c					May 5	res	c			yes	res				
Carolina chickadee																			
Hudsonian chickadee															tv, res	c, oc			
Golden-crowned kinglet			tv, wv	c, oc		May 5, 11	Sept. 28, Oct.			wv, sr	c, local				tv				
Ruby-crowned kinglet			tv	c	Apr. 19, 21, 27	May 10				tv	c								
Blue-gray gnatcatcher																			
Townsend solitaire																fc			yes
Wood thrush			sr	c	May 6, 11				yes	sr	c			yes	sr	c			
Wilson thrush			sr	c	Apr. 29, May 3, 8				yes	sr				yes	tv				
Gray-cheeked thrush			tv	unc	May 15, 19	May 22				tv									
Bicknell thrush										sr	local			June	tv, sr	c			yes
Olive-backed thrush			tv	c	May 7, 14	May 22	Sept. 3			tv, sr	c, local			yes		c			yes
Hermit thrush			tv, sr	c, local	Mar. 26, 31, Apr. 20				yes	tv, sr	c, local			yes	sr	c			
American robin		yes	sr, res	ab, oc	Mar. 7, 12, 22				yes	sr, res	ab, oc			yes					yes
Varied thrush																			
Wheatear																c			
Bluebird		yes	sr	c	Feb. 24, Mar. 6, 9				yes	sr	c			yes	sr				

SPECIES RECORDED	WASHINGTON						WAYNE			
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Br
Rose-breasted grosbeak	sr	fc	May 9, 12		Sept. 10	May 30, June 10, 24	sr			
Blue grosbeak										
Indigo bunting	sr	c	May 12		Sept. 10	May 30, July 1	sr	c		yes
Painted bunting										
Dickcissel										
Lark bunting										
Louisiana tanager										
Scarlet tanager	sr	c	May 7, 10		Oct. 12	May 29, June 15	sr	fc		
Summer tanager										
Purple martin	sr	unc				yes	sr			
Cliff swallow	sr	ab	Apr. 20, 27		Sept. 10	May 15	sr			
Barn swallow	sr	ab	Apr. 18, 26		Sept. 5	May 15	sr	c		yes
Tree swallow	sr, tv	unc, c				yes	tv, sr	ab, unc		yes
Bank swallow	sr	c	May 1		Sept. 1	May 22, July 1	sr	c		yes
Rough-winged swallow										
Bohemian waxwing										
Cedar waxwing	sr, res	fc, oc				June 2, Aug. 1	sr	c		yes
Northern shrike	wv	fc					wv	oc		
Migrant shrike	sr	unc				4 June '80	sr			yes
Red-eyed vireo	sr	ab	May 12			June 1	sr	c	May 1	yes
Philadelphia vireo							tv	unc		
Warbling vireo	sr	fc	May 8			yes	sr	c		yes
Yellow-throated vireo	sr	fc	May 5			May 30	sr	unc	May 5	yes
Blue-headed vireo	sr	oc					tv	fc		
Plumbeous vireo										
White-eyed vireo										
Black and white warbler	sr, tv	fc, ab	May 1			May 28	tv, sr	c, oc	May 3	yes
Prothonotary warbler										
Worm-eating warbler										
Blue-winged warbler										
Golden-winged warbler		oc	May 10, 20							
Lawrence warbler										
Brewster warbler										
Nashville warbler	tv, sr	c, oc					tv	c		
Orange-crowned warbler							tv	rare		
Tennessee warbler							tv	rare		
Southern parula warbler										
Northern parula warbler	tv, sr	ab, unc	May 10	May 20			tv	c		
Cape May warbler							tv	rare		
Yellow warbler	sr	ab	May 8, 12			May 25, June 5	sr	c		yes
Black-throated blue warbler	tv, sr	c, unc	May 10	May 18		June 9	tv	c		
Myrtle warbler	tv	ab	May 1, 12	May 16			tv	c		
Magnolia warbler	tv, sr	fc, rare	May 18	June 5		June 8	tv	fc		
Cerulean warbler							sr	local		
Chestnut-sided warbler	sr	ab	May 6			June 5	tv	c		
Bay-breasted warbler	tv	oc			Oct. 8		tv	fc		
Black-poll warbler	tv	fc	May 22	May 30			tv	fc		
Blackburnian warbler	tv, sr	c, fc	May 15				tv	c		
Yellow-throated warbler										
Black-throated green warbler	sr, tv	c, ab	May 12		Sept. 8	June 5	tv, sr	c, oc		
Pine warbler	sr	rare					tv	oc		
Palm warbler							tv	unc		
Yellow palm warbler										
Prairie warbler										
Ovenbird	sr	ab	May 7, 9		Sept. 10	May 25, June 20	sr	c		yes
Water-thrush							tv	fc		
Grinnell water-thrush										
Louisiana water-thrush										
Kentucky warbler										
Connecticut warbler										
Mourning warbler							tv	fc		
Northern yellow-throat	sr	fc	May 10			June 5	sr	c		yes
Yellow-breasted chat	sr	rare				yes, 1890				
Hooded warbler							sr	c, local		yes, Jul
Wilson warbler							tv	irreg		
Canadian warbler	tv						tv	c		
American redstart	sr	ab	May 5			May 25	sr	c		yes
American pipit	tv	fc					tv	c		
Mockingbird										
Catbird	sr	ab	May 9, 12			yes	sr	c		yes
Brown thrasher	sr	fc	May 10		Sept. 15	yes	sr	fc		yes
Carolina wren										
House wren	sr	unc	May 10			yes	sr	unc		yes
Winter wren	tv						tv	fc		
Short-billed marsh wren	sr	local				June 25, July 20				
Long-billed marsh wren							sr	c		yes
Brown creeper	sr	unc	Apr. 15				tv, wv	c, oc		
White-breasted nuthatch	res	c				May 15	res	c		yes
Red-breasted nuthatch	tv	fc					tv	fc		
Brown-headed nuthatch										
Tufted titmouse										
Chickadee	res	c				May 17	res	c		yes
Carolina chickadee										
Hudsonian chickadee										
Golden-crowned kinglet	tv, wv	c, oc					tv, wv	ab, oc		
Ruby-crowned kinglet	tv	fc					tv	c		
Blue-gray gnatcatcher										
Townsend solitaire										
Wood thrush	sr	fc				June 9	sr	c		yes
Wilson thrush	sr	ab	May 10			May 27	sr	c		yes
Gray-cheeked thrush	tv	c					tv	fc		
Bicknell thrush	tv	unc, 12 Oct. '90								
Olive-backed thrush	tv, sr	c, unc				yes	tv	c		
Hermit thrush	sr	ab	Apr.			yes	tv	c		
American robin	sr	ab	Mar. 22			yes	sr	ab		yes
Varied thrush										
Wheatear										
Bluebird	sr	ab	Feb. 25, Mar. 12			yes	sr	c		yes

WESTCHESTER							WYOMING		
sident or nsient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Breeds
	c	May 2			Oct. 1	yes	sr		
	c	May 4, 10			Oct. 17	yes	sr	fc	yes
	c	May 4, 9			Oct. 9	yes	sr	fc	yes
	fc	Apr. 27			Sept. 1	yes			
	c	May 1			Sept. 12	yes	sr	c	yes
	c	Apr. 15, 21			Sept. 22	yes	sr	ab	yes
	c	Apr. 4, 9	May 26	Aug. 4	Oct. 16		tv, sr	c, oc	
	fc	Apr. 18			Oct. 1	yes	sr		yes
	c, local	Apr. 17, 25			Aug. 12	yes			
	c					yes	sr, res	c, oc	yes
	fc		Apr. 17	Oct. 26			wv		
	rare					yes	sr		yes
	c	Apr. 29, May 8			Oct. 4, 14, Nov. 3	yes	sr	c	yes
	rare			Sept. 20	Oct. 20				
	c	May 2			Sept. 18	yes	sr	c	yes
	c	Apr. 30			Sept. 7	yes	sr		yes
	c	Apr. 22, May 1	May 14	Sept. 8	Oct. 20		tv		
	ab	Apr. 29			Oct. 3	yes			
	ab	Apr. 18, 20, 25			Oct. 1, 15	yes	tv, sr	c, oc	
		2 June '95							
	c	May 1, 7, 16			Aug. 15, 23	yes			
	c	May 2, 4, 13	May 17		Sept. 7	May 25			
	rare	May 8, 12, 13			Aug. 25	yes			
					Aug. 31				
	rare	8 May '00			July 24, Aug. 11, 24				
	c	Apr. 30, May 7, 12	May 29	Aug. 11	Oct. 4, 7		tv		
	rare								
	unc	May 16, 22	May 25	Aug. 22	Oct. 2				
	unc		May 27						
	c	Apr. 30, May 2, 7	May 23, 28	Sept. 21	Oct. 7		tv		
	fc	May 11, 13	May 14, 20	Aug. 20	Oct. 1				
	c	Apr. 30			Sept. 27	yes	sr	c	yes
	ab	Apr. 25, 30	May 27	Aug. 26	Oct. 10		tv		
	ab, oc	Apr. 13, 21	May 22, 28	Aug. 16	Nov. 11		tv	c	
	c	May 2, 9	May 29	Aug. 13	Oct. 11		tv		
	c	May 2, 11			Sept. 24		sr		
	fc	May 3, 14	May 29	Aug. 5	Sept. 26		tv		
	ab	May 2, 7, 12	June 6	Aug. 30	Oct. 16		tv		
	c	Apr. 30, May 10	May 29	Aug. 15	Oct. 15		tv		
	c, oc	Apr. 29	May 23, June 3	Sept. 1	Oct. 26	yes	tv, sr	c, oc	
	irreg	Apr. 19	Apr. 23						
	rare	Apr. 29	May 7	Sept. 30	Oct. 12		tv	unc	
	c	Apr. 11, 16, 18	May 5	Sept. 20	Nov. 8				
	rare	May 1, 3, 6			Sept. 14				
	c, ab	Apr. 19, 30			Oct. 10	yes	sr	c	yes
	fc	May 6, 17	May 27	July 28, Aug. 11	Oct. 3				
	c	Apr. 9, 20, May 10			Aug. 24	yes			
	c, local	May 2, 21			Aug. 27, Oct. 10	June 21			
	rare			Aug. 26, Sept. 14, 22	Sept. 26, Oct. 9, 12				
	fc, irreg	May 4, 10	May 29	Aug. 18	Oct. 1		tv, sr		
	c	Apr. 28, May 5, 9			Sept. 9, Oct. 3, 14	yes	sr		yes
	fc	Apr. 28, May 9, 15			Aug. 29	May 31, June 10			
	unc	May 8, 14			Sept. 1				
	fc	May 3, 9, 13	May 30	Aug. 10	Sept. 9, Oct.		tv		
	c	May 6, 11, 17	June 2	Aug. 10, 31	Oct. 11		tv, sr		
	ab	Apr. 27, May 1, 8			Sept. 6, Oct. 3	yes	sr	c	yes
	c	Mar. 26		Sept. 24	Nov. 16		tv		
	c	Apr. 28, 30			Oct. 25	yes	sr	c	yes
	fc	Apr. 22			Oct. 28	yes	sr		yes
	rare, oc	Mar. 8							
	ab	Apr. 22, 23, 30			Oct. 14	yes	sr		yes
	fc		Apr. 27	Sept. 18			tv		
	rare				Oct. 16				
	c	May 7, 10			Oct. 28	yes	sr		yes
	fc		May 7	Sept. 20			tv, wv	c, oc	
	c					yes	res	c	yes
	irreg		May 8, 16	Aug. 8, Dec. 12			tv		
	ab					yes	res	c	yes
	c		Apr. 28	Sept. 20			tv, wv	c, oc	
	c	Apr. 8, 16	May 9, 13	Sept. 16	Nov. 6, 30		tv	fc	
	ab	Apr. 25, 30, May 5			Sept. 18, Oct. 2, 6	yes	sr		yes
	c	Apr. 29, May 3			Sept. 5	yes	sr	c	yes
	fc	May 15	June 1	Sept. 20	Oct. 17		tv		
	ab	May 2, 9	May 30	Sept. 19	Oct. 22		tv		
	ab	Feb. 28, Apr. 5, 15	May 9, 18	Oct. 18, 22	Nov. 1, 26		tv	c	
	c, oc	Feb. 25, Mar. 4			Oct. 22, 30	yes	sr	c	yes
	c, fc	Feb. 22, 29			Oct. 2, 30, Nov. 2	yes	sr	c	yes

SPECIES RECORDED	WASHINGTON						WAYNE			
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Departs for south	Breeds	Resident or transient	Common or rare	Arrives from south	Breeds
Rose-breasted grosbeak	sr	fc	May 9, 12		Sept. 10	May 30, June 10, 24	sr			
Blue grosbeak										
Indigo bunting	sr	c	May 12		Sept. 10	May 30, July 1	sr	c		yes
Painted bunting										
Dickcissel										
Lark bunting										
Louisiana tanager										
Scarlet tanager	sr	c	May 7, 10		Oct. 12	May 29, June 15	sr	fc		
Summer tanager										
Purple martin	sr	unc				yes	sr			
Cliff swallow	sr	ab	Apr. 20, 27		Sept. 10	May 15	sr			
Barn swallow	sr	ab	Apr. 18, 26		Sept. 5	May 15	sr	c		yes
Tree swallow	sr, tv	unc, c				yes	tv, sr	ab, unc		yes
Bank swallow	sr	c	May 1		Sept. 1	May 22, July 1	sr	c		yes
Rough-winged swallow										
Bohemian waxwing										
Cedar waxwing	sr, res	fc, oc				June 2, Aug. 1	sr	c		yes
Northern shrike	wv	fc					wv	oc		
Migrant shrike	sr	unc				4 June '80	sr			yes
Red-eyed vireo	sr	ab	May 12			June 1	sr	c	May 1	yes
Philadelphia vireo							tv	unc		
Warbling vireo	sr	fc	May 8			yes	sr	c		yes
Yellow-throated vireo	sr	fc	May 5			May 30	sr	unc	May 5	yes
Blue-headed vireo	sr	oc					tv	fc		
Plumbeous vireo										
White-eyed vireo										
Black and white warbler	sr, tv	fc, ab	May 1			May 28	tv, sr	c, oc	May 3	yes
Prothonotary warbler										
Worm-eating warbler										
Blue-winged warbler										
Golden-winged warbler		oc	May 10, 20							
Lawrence warbler										
Brewster warbler										
Nashville warbler	tv, sr	c, oc					tv	c		
Orange-crowned warbler							tv	rare		
Tennessee warbler							tv	rare		
Southern parula warbler										
Northern parula warbler	tv, sr	ab, unc	May 10	May 20			tv	c		
Cape May warbler							tv	rare		
Yellow warbler	sr	ab	May 8, 12			May 25, June 5	sr	c		yes
Black-throated blue warbler	tv, sr	c, unc	May 10	May 18		June 9	tv	c		
Myrtle warbler	tv	ab	May 1, 12	May 16			tv	c		
Magnolia warbler	tv, sr	fc, rare	May 18	June 5		June 8	tv	fc		
Cerulean warbler							sr	local		
Chestnut-sided warbler	sr	ab	May 6			June 5	tv	c		
Bay-breasted warbler	tv	oc			Oct. 8		tv	fc		
Black-poll warbler	tv	fc	May 22	May 30			tv	fc		
Blackburnian warbler	tv, sr	c, fc	May 15				tv	c		
Yellow-throated warbler										
Black-throated green warbler	sr, tv	c, ab	May 12							
Pine warbler	sr	rare			Sept. 8	June 5	tv, sr	c, oc		
Palm warbler							tv	oc		
Yellow palm warbler							tv	unc		
Prairie warbler										
Ovenbird	sr	ab	May 7, 9							
Water-thrush					Sept. 10	May 25, June 20	sr	c		yes
Grinnell water-thrush							tv	fc		
Louisiana water-thrush										
Kentucky warbler										
Connecticut warbler										
Mourning warbler										
Northern yellow-throat	sr	fc	May 10				tv	fc		
Yellow-breasted chat	sr	rare				June 5	sr	c		yes
Hooded warbler						yes, 1890				
Wilson warbler							sr	c, local		yes, July 25
Canadian warbler	tv						tv	irreg		
American redstart	sr	ab	May 5				tv	c		
American pipit	tv	fc				May 25	sr	c		yes
Mockingbird							tv	c		
Catbird	sr	ab	May 9, 12							
Brown thrasher	sr	fc	May 10			yes	sr	c		yes
Carolina wren					Sept. 15	yes	sr	fc		yes
House wren	sr	unc	May 10							
Winter wren	tv					yes	sr	unc		yes
Short-billed marsh wren	sr	local					tv	fc		
Long-billed marsh wren						June 25, July 20				
Brown creeper	sr	unc	Apr. 15				sr	c		yes
White-breasted nuthatch	res	c					tv, wv	c, oc		
Red-breasted nuthatch	tv	fc				May 15	res	c		yes
Brown-headed nuthatch							tv	fc		
Tufted titmouse										
Chickadee	res	c								
Carolina chickadee						May 17	res	c		yes
Hudsonian chickadee										
Golden-crowned kinglet	tv, wv	c, oc								
Ruby-crowned kinglet	tv	fc					tv, wv	ab, oc		
Blue-gray gnatcatcher							tv	c		
Townsend solitaire										
Wood thrush	sr	fc								
Wilson thrush	sr	ab	May 10			June 9	sr	c		yes
Gray-cheeked thrush	tv	c				May 27	sr	c		yes
Bicknell thrush	tv	unc, 12 Oct. '90					tv	fc		
Olive-backed thrush	tv, sr	c, unc								
Hermit thrush	sr	ab	Apr.			yes	tv	c		
American robin	sr	ab	Mar. 22			yes	tv	c		
Varied thrush						yes	sr	ab		yes
Wheatear										
Bluebird	sr	ab	Feb. 25, Mar. 12			yes	sr	c		yes

SPECIES RECORDED	WESTCHESTER							WYOMING		
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds	Resident or transient	Common or rare	Breeds
Rose-breasted grosbeak	sr	c	May 2			Oct. 1	yes	sr		
Blue grosbeak										
Indigo bunting	sr	c	May 4, 10			Oct. 17	yes	sr	fc	yes
Painted bunting										
Dickcissel										
Lark bunting										
Louisiana tanager										
Scarlet tanager	sr	c	May 4, 9			Oct. 9	yes	sr	fc	yes
Summer tanager										
Purple martin	sr	fc	Apr. 27			Sept. 1	yes			
Cliff swallow	sr	c	May 1			Sept. 12	yes	sr	c	yes
Barn swallow	sr	c	Apr. 15, 21			Sept 22	yes	sr	ab	yes
Tree swallow	tv	c	Apr. 4, 9	May 26	Aug. 4	Oct. 16		tv, sr	c, oc	
Bank swallow	sr	fc	Apr. 18			Oct. 1	yes	sr		yes
Rough-winged swallow	sr	c, local	Apr. 17, 25			Aug. 12	yes			
Bohemian waxwing										
Cedar waxwing	res	c					yes	sr, res	c, oc	yes
Northern shrike	wv	fc		Apr. 17	Oct. 26			wv		
Migrant shrike	tv, sr	rare					yes	sr		yes
Red-eyed vireo	sr	c	Apr. 29, May 8			Oct. 4, 14, Nov. 3	yes	sr	c	yes
Philadelphia vireo	tv	rare			Sept. 20	Oct. 20				
Warbling vireo	sr	c	May 2			Sept. 18	yes	sr	c	yes
Yellow-throated vireo	sr	c	Apr. 30			Sept. 7	yes	sr		yes
Blue-headed vireo	tv	c	Apr. 22, May 1	May 14	Sept. 8	Oct. 20		tv		
Plumbeous vireo										
White-eyed vireo	sr	ab	Apr. 29			Oct. 3	yes			
Black and white warbler	sr	ab	Apr. 18, 20, 25			Oct. 1, 15	yes	tv, sr	c, oc	
Prothonotary warbler	av		2 June '05							
Worm-eating warbler	sr	c	May 1, 7, 16			Aug. 15, 23	yes			
Blue-winged warbler	sr	c	May 2, 4, 13	May 17		Sept. 7	May 25			
Golden-winged warbler	sr	rare	May 8, 12, 13			Aug. 25	yes			
Lawrence warbler						Aug. 31				
Brewster warbler	sr	rare	8 May '00			July 24, Aug. 11, 24				
Nashville warbler	tv	c	Apr. 30, May 7, 12	May 29	Aug. 11	Oct. 4, 7		tv		
Orange-crowned warbler	tv	rare								
Tennessee warbler	tv	unc	May 16, 22	May 25	Aug. 22	Oct. 2				
Southern parula warbler		unc		May 27						
Northern parula warbler	tv	c	Apr. 30, May 2, 7	May 23, 28	Sept. 21	Oct. 7		tv		
Cape May warbler	tv	fc	May 11, 13	May 14, 20	Aug. 20	Oct. 1				
Yellow warbler	sr	c	Apr. 30			Sept. 27	yes	sr	c	yes
Black-throated blue warbler	tv	ab	Apr. 25, 30	May 27	Aug. 26	Oct. 10		tv		
Myrtle warbler	tv, wv	ab, oc	Apr. 13, 21	May 22, 28	Aug. 16	Nov. 11		tv	c	
Magnolia warbler	tv	c	May 2, 9	May 29	Aug. 13	Oct. 11		tv		
Cerulean warbler										
Chestnut-sided warbler	sr	c	May 2, 11			Sept. 24		sr		
Bay-breasted warbler	tv	fc	May 3, 14	May 20	Aug. 5	Sept. 26		tv		
Black-poll warbler	tv	ab	May 2, 7, 12	June 6	Aug. 30	Oct. 16		tv		
Blackburnian warbler	tv	c	Apr. 30, May 10	May 29	Aug. 15	Oct. 15		tv		
Yellow-throated warbler										
Black-throated green warbler	tv, sr	c, oc	Apr. 20	May 23, June 3	Sept. 1	Oct. 26	yes	tv, sr	c, oc	
Pine warbler	tv	irreg	Apr. 19	Apr. 23						
Palm warbler	tv	rare	Apr. 29	May 7	Sept. 30	Oct. 12		tv	unc	
Yellow palm warbler	tv	c	Apr. 11, 16, 18	May 5	Sept. 20	Nov. 8				
Prairie warbler	sr	rare	May 1, 3, 6			Sept. 14				
Ovenbird	sr, tv	c, ab	Apr. 19, 30			Oct. 10	yes	sr	c	yes
Water-thrush	tv	fc	May 6, 17	May 27	July 28, Aug. 11	Oct. 3				
Grinnell water-thrush										
Louisiana water-thrush	sr	c	Apr. 9, 20, May 10			Aug. 24	yes			
Kentucky warbler	sr	c, local	May 2, 21			Aug. 27, Oct. 10	June 21			
Connecticut warbler	tv	rare			Aug. 26, Sept. 14, 22	Sept. 20, Oct. 9, 12				
Mourning warbler	tv	fc, irreg	May 4, 10	May 29	Aug. 18	Oct. 1		tv, sr		
Northern yellow-throat	sr	c	Apr. 28, May 5, 9			Sept. 9, Oct. 3, 14	yes	sr		yes
Yellow-breasted chat	sr	fc	Apr. 28, May 9, 15			Aug. 29	May 31, June 10			
Hooded warbler	sr	unc	May 8, 14			Sept. 1				
Wilson warbler	tv	fc	May 3, 9, 13	May 30	Aug. 10	Sept. 9, Oct.		tv		
Canadian warbler	tv	c	May 6, 11, 17	June 2	Aug. 10, 31	Oct. 11		tv, sr		
American redstart	sr	ab	Apr. 27, May 1, 8			Sept. 6, Oct. 3	yes	sr	c	yes
American pipit	tv	c	Mar. 26		Sept. 24	Nov. 16		tv		
Mockingbird										
Catbird	sr	c	Apr. 28, 30			Oct. 25	yes	sr	c	yes
Brown thrasher	sr	fc	Apr. 22			Oct. 28	yes	sr		yes
Carolina wren	sr, res	rare, oc	Mar. 8							
House wren	sr	ab	Apr. 22, 23, 30			Oct. 14	yes	sr		yes
Winter wren	tv, wv	fc						tv		
Short-billed marsh wren	sr	rare		Apr. 27	Sept. 18	Oct. 16				
Long-billed marsh wren	sr	c	May 7, 10			Oct. 28	yes	sr		yes
Brown creeper	wv	fc		May 7	Sept. 20			tv, wv	c, oc	
White-breasted nuthatch	res	c					yes	res	c	yes
Red-breasted nuthatch	wv	irreg		May 8, 16	Aug. 8, Dec. 12			tv		
Brown-headed nuthatch										
Tufted titmouse	res	ab					yes	res	c	yes
Chickadee										
Carolina chickadee										
Hudsonian chickadee	wv	c		Apr. 28	Sept. 20			tv, wv	c, oc	
Golden-crowned kinglet	tv	c	Apr. 8, 16	May 9, 13	Sept. 16	Nov. 6, 30		tv	fc	
Ruby-crowned kinglet										
Blue-gray gnatcatcher										
Townsend solitaire	sr	ab	Apr. 25, 30, May 5			Sept. 18, Oct. 2, 6	yes	sr		yes
Wood thrush	sr	c	Apr. 29, May 3			Sept. 5	yes	sr	c	yes
Wilson thrush	tv	fc	May 15	June 1	Sept 20	Oct. 17		tv		
Gray-cheeked thrush										
Bicknell thrush	tv	ab	May 2, 9	May 30	Sept. 10	Oct. 22		tv		
Olive-backed thrush	tv	ab	Feb. 28, Apr. 5, 15	May 9, 18	Oct. 18, 22	Nov. 1, 26		tv	c	
Hermit thrush	sr, res	c, oc	Feb. 25, Mar. 4			Oct. 22, 30	yes	sr	c	yes
American robin										
Varied thrush										
Wheatear										
Bluebird	sr, res	c, fc	Feb. 22, 29			Oct. 2, 30, Nov. 2	yes	sr	c	yes

SPECIES RECORDED	Resident or transient	Common or rare	Arrives from south
Rose-breasted grosbeak	sr	c	May 7, 8
Blue grosbeak			
Indigo bunting	sr	c	May 10
Painted bunting			
Dickcissel			
Lark bunting			
Louisiana tanager			
Scarlet tanager	sr	c	May 4, 7
Summer tanager			
Purple martin		rare	June 5
Cliff swallow	sr	fc	Apr. 13, 16, 30
Barn swallow	sr	c	Apr. 4, 12, 23
Tree swallow	tv, sr	c, rare	Apr. 4
Bank swallow	sr	c	Apr. 26, 30
Rough-winged swallow	sr	fc	Apr. 25
Bohemian waxwing	av		
Cedar waxwing	sr, res	c, fc	Mar. 25
Northern shrike	wv	unc	
Migrant shrike	sr	local	
Red-eyed vireo	sr	c	Apr. 23, May 6
Philadelphia vireo	tv	oc	
Warbling vireo	sr	c	Apr. 26, 30, M
Yellow-throated vireo	sr	fc	May 4
Blue-headed vireo	tv	unc	Apr. 19
Plumbeous vireo			
White-eyed vireo			
Black and white warbler	sr	fc	Apr. 30, May 7
Prothonotary warbler			
Worm-eating warbler	sr	very rare	May 12, 23
Blue-winged warbler	tv	rare	
Golden-winged warbler	sr	local	May 10
Lawrence warbler			
Brewster warbler			
Nashville warbler	tv	fc	Apr. 30, May 5
Orange-crowned warbler			
Tennessee warbler	tv	rare	
Southern parula warbler			
Northern parula warbler	tv, sr	fc, oc	
Cape May warbler	tv	rare	May 4, 17
Yellow warbler	sr	ab	Apr. 23, 29, M
Black-throated blue warbler	tv, sr	c, local	May 3, 4, 6
Myrtle warbler	tv	ab	Apr. 19, 30, M
Magnolia warbler	tv, sr	c, fc	Apr. 28, May 3
Cerulean warbler	sr	c, local	May 3
Chestnut-sided warbler	sr	c	May 3, 13
Bay-breasted warbler	tv	ab	Apr. 30, May 1
Black-poll warbler	tv	c	May 5, 7, 10
Blackburnian warbler	tv, sr	ab, oc	Apr. 30, May 1
Yellow-throated warbler			
Black-throated green warbler	tv, sr	c, fc	Apr. 23, 29, M
Pine warbler	tv, sr	fc, local	May 3, 6
Palm warbler	tv	unc	Apr. 20, 30
Yellow palm warbler			
Prairie warbler	sr	rare	May 10
Ovenbird	sr	c	Apr. 28, 30, M
Water-thrush	tv, sr	fc, local	Apr. 26, May 1
Grinnell water-thrush			
Louisiana water-thrush	sr	c	Apr. 9, 16
Kentucky warbler		rare	May 10
Connecticut warbler	tv	unc	
Mourning warbler	sr	unc	May 9
Northern yellow-throat	sr	c	Apr. 30, May 3
Yellow-breasted chat	sr	fc	May 6, 14
Hooded warbler			
Wilson warbler	tv	unc	May 6, 10, 16
Canadian warbler	tv, sr	c	May 4
American redstart	sr	c	Apr. 30, May 4
American pipit	tv	c	May 9
Mockingbird			
Catbird	sr	c	May 5
Brown thrasher	sr	unc	Apr. 30
Carolina wren			
House wren	sr	unc	May 11
Winter wren	tv	fc	Mar. 26, Apr.
Short-billed marsh wren			
Long-billed marsh wren	sr	c	May 3, 16
Brown creeper	wv, sr	fc, local	
White-breasted nuthatch	res	c	
Red-breasted nuthatch	tv, res	fc, rare	Mar. 15, Apr.
Brown-headed nuthatch			
Tufted titmouse			
Chickadee	res	ab	
Carolina chickadee			
Hudsonian chickadee			
Golden-crowned kinglet	tv	c	Apr. 2, 4
Ruby-crowned kinglet	tv	c	Apr. 9, 14, 23
Blue-gray gnatcatcher	sr	rare	Apr. 30
Townsend solitaire			
Wood thrush	sr	c	May 4, 6
Wilson thrush	sr	ab	Apr. 30
Gray-cheeked thrush	tv	oc	
Bicknell thrush			
Olive-backed thrush	tv	c	May 10
Hermit thrush	tv, sr	c, unc	Apr. 9, 16
American robin	sr, res	ab, rare	Mar. 7
Varied thrush			
Wheatear			
Bluebird	sr	c	Mar. 7, 13

TES

es	Returns from north	Departs for south	Breeds
		Aug. 26	May 23, 25, June 13
		Oct. 2	May 25, June 10, July 1
		Sept. 23	May 24, 30, July 4
		Sept. 8	May 29, June 11
		Sept. 12	May 22, 30, July 29
			May 19, June 5, 22
			May 20, 30, June 22
			May 25, June 6, 25
	1880		
		Oct. 7	June 13, 20, Aug. 19
	Nov. 27		
			May 9
		Sept. 28	May 28, June 6, 30
	Sept. 21	Sept. 28	
		Sept. 22	May 23, 28, June 15
		Sept. 9	May 26, June 10, 16
		Oct. 5	
		Sept. 23	May 20, June 12
			? yes
			June 3, 9
	Sept. 20		
	20 Sept. '03		
			May 17, 25, June 19
		Sept. 23, Oct. 10	June 4, 10, 22
	Sept. 21, 30	Oct. 6, 22	
		Sept. 23	June 2, 3, 24
			May 29, June 5, 22
		Aug. 22	May 28, June 1, 26
	Sept. 9, 20	Oct. 10	
	Sept	Oct. 20	
	Sept. 7	Sept. 24	May 29, June 4, 7
			May 26, June 1, 20
		Oct. 15	May 24, June 4, 24
		Oct.	
			June 1, 2
		Sept. 22, Oct. 2	May 26, June 1, 24
		Sept. 16	May 18, 25, June 10
		Aug. 30	May 4, 15, July 4
	Sept. 4	Sept. 27	
			June 1, 4, 24
		Sept. 16, 29	May 25, June 1, July 8
			May 27, 30, June 13
	Sept. 7	Sept. 24	
		Aug. 27	June 1, 10, 20
		Sept. 20	May 23, 30, June 24
	Sept. 21, 25	Oct. 28	
		Oct. 2	May 18, 30, July 5
		Oct.	June 4, 22
			yes
	Sept. 14, 24	Oct. 25	
		Sept. 16, Oct. 21	May 24, Aug. 13
	Sept. 21, Oct. 1		May 5, 12, 20
			May 2, 15
	Oct. 8	Nov. 22	May
			May 14, 26, June 20
	Sept. 20	Oct. 30	
	Sept	Oct. 22	
		Oct. 1	May 22, June 5, 28
		Sept. 15	May 21, 25, June 24
	Sept. 24	Oct. 12	
	Sept. 20, Oct. 1	Oct. 20	May 29, June 10, July 2
		Nov. 8	Apr. 22, May 30, July 19
		Oct. 23, Nov. 2	Apr. 24, May 19, June 15

SPECIES RECORDED	YATES						
	Resident or transient	Common or rare	Arrives from south	Leaves for north	Returns from north	Departs for south	Breeds
Rose-breasted grosbeak	sr	c	May 7, 8			Aug. 26	May 23, 25, June 13
Blue grosbeak						Oct. 2	May 25, June 10, July 1
Indigo bunting	sr	c	May 10				
Painted bunting							
Dickcissel							
Lark bunting							
Louisiana tanager						Sept. 23	May 24, 30, July 4
Scarlet tanager	sr	c	May 4, 7				
Summer tanager							
Purple martin		rare	June 5			Sept. 8	May 29, June 11
Cliff swallow	sr	fc	Apr. 13, 16, 30			Sept. 12	May 22, 30, July 29
Barn swallow	sr	c	Apr. 4, 12, 23				May 19, June 5, 22
Tree swallow	tv, sr	c, rare	Apr. 4				May 20, 30, June 22
Bank swallow	sr	c	Apr. 26, 30				May 25, June 6, 25
Rough-winged swallow	sr	fc	Apr. 25				
Bohemian waxwing	av				1880		
Cedar waxwing	sr, res	c, fc	Mar. 25			Oct. 7	June 13, 20, Aug. 19
Northern shrike	wv	unc		Mar. 30	Nov. 27		
Migrant shrike	sr	local					May 9
Red-eyed vireo	sr	c	Apr. 23, May 6			Sept. 28	May 28, June 6, 30
Philadelphia vireo	tv	oc			Sept. 21	Sept. 28	
Warbling vireo	sr	c	Apr. 26, 30, May 5			Sept. 22	May 23, 28, June 15
Yellow-throated vireo	sr	fc	May 4			Sept. 9	May 26, June 10, 16
Blue-headed vireo	tv	unc	Apr. 19	May 4		Oct. 5	
Plumbeous vireo							
White-eyed vireo						Sept. 23	May 20, June 12
Black and white warbler	sr	fc	Apr. 30, May 7				
Prothonotary warbler							? yes
Worm-eating warbler	sr	very rare	May 12, 23				
Blue-winged warbler	tv	rare					June 3, 9
Golden-winged warbler	sr	local	May 10				
Lawrence warbler							
Brewster warbler							
Nashville warbler	tv	fc	Apr. 30, May 5		Sept. 20		
Orange-crowned warbler					20 Sept. '03		
Tennessee warbler	tv	rare					
Southern parula warbler							
Northern parula warbler	tv, sr	fc, oc	May 4, 17				May 17, 25, June 19
Cape May warbler	tv	rare	Apr. 23, 29, May 2				June 4, 10, 22
Yellow warbler	sr	ab	May 3, 4, 6			Sept. 23, Oct. 10	
Black-throated blue warbler	tv, sr	c, local	Apr. 19, 30, May 5	May 12	Sept. 21, 30	Oct. 6, 22	
Myrtle warbler	tv	ab	Apr. 28, May 3			Sept. 23	June 2, 3, 24
Magnolia warbler	tv, sr	c, fc	May 3				May 20, June 5, 22
Cerulean warbler	sr	c, local	May 3, 13			Aug. 22	May 28, June 1, 26
Chestnut-sided warbler	sr	c	Apr. 30, May 13	May 24	Sept. 9, 20	Oct. 10	
Bay-breasted warbler	tv	ab	May 5, 7, 16	May 28	Sept.	Oct. 20	
Black-poll warbler	tv	c	Apr. 30, May 13	May 23	Sept. 7	Sept. 24	May 29, June 4, 7
Blackburnian warbler	tv, sr	ab, oc					
Yellow-throated warbler			Apr. 23, 29, May 4				May 26, June 1, 20
Black-throated green warbler	tv, sr	c, fc	May 3, 6	May 20		Oct. 15	May 24, June 4, 24
Pine warbler	tv, sr	fc, local	Apr. 20, 30			Oct.	
Palm warbler	tv	unc					June 1, 2
Yellow palm warbler			May 10			Sept. 22, Oct. 2	May 26, June 1, 24
Prairie warbler	sr	rare	Apr. 28, 30, May 3			Sept. 16	May 18, 25, June 10
Ovenbird	sr	c	Apr. 26, May 1				
Water-thrush	tv, sr	fc, local				Aug. 30	May 4, 15, July 4
Grinnell water-thrush			Apr. 9, 16				
Louisiana water-thrush	sr	c	May 10		Sept. 4	Sept. 27	
Kentucky warbler		rare					June 1, 4, 24
Connecticut warbler	tv	unc	May 9			Sept. 16, 29	May 25, June 1, July 8
Mourning warbler	sr	unc	Apr. 30, May 3				May 27, 30, June 13
Northern yellow-throat	sr	c	May 6, 14				
Yellow-breasted chat	sr	fc		May 20, 25	Sept. 7	Sept. 24	
Hooded warbler			May 6, 10, 16	May 20		Aug. 27	June 1, 10, 20
Wilson warbler	tv	unc	May 4			Sept. 20	May 23, 30, June 24
Canadian warbler	tv, sr	c	Apr. 30, May 4, 6		Sept. 21, 25	Oct. 28	
American redstart	sr	c	May 9				
American pipit	tv	c				Oct. 2	May 18, 30, July 5
Mockingbird			May 5			Oct.	June 4, 22
Catbird	sr	c	Apr. 30				
Brown thrasher	sr	unc					yes
Carolina wren			May 11	May 6	Sept. 14, 24	Oct. 25	
House wren	sr	unc	Mar. 26, Apr. 24				
Winter wren	tv	fc				Sept. 16, Oct. 21	May 24, Aug. 13
Short-billed marsh wren			May 3, 16	Apr. 20, 30	Sept. 21, Oct. 1		May 5, 12, 20
Long-billed marsh wren	sr	c					May 2, 15
Brown creeper	wv, sr	fc, local		May 5	Oct. 8	Nov. 22	May
White-breasted nuthatch	res	c	Mar. 15, Apr. 12				
Red-breasted nuthatch	tv, res	fc, rare					May 14, 26, June 20
Brown-headed nuthatch							
Tufted titmouse							
Chickadee	res	ab					
Carolina chickadee				Apr. 30	Sept. 20	Oct. 30	
Hudsonian chickadee			Apr. 2, 4	May 1	Sept.	Oct. 22	
Golden-crowned kinglet	tv	c	Apr. 9, 14, 23				
Ruby-crowned kinglet	tv	c	Apr. 30			Oct. 1	May 22, June 5, 28
Blue-gray gnatcatcher	sr	rare				Sept. 15	May 21, 25, June 24
Townsend solitaire			May 4, 6				
Wood thrush	sr	c	Apr. 30				
Wilson thrush	sr	ab				Oct. 12	
Gray-cheeked thrush	tv	oc		May 20, 25	Sept. 24	Oct. 20	May 29, June 10, July 7
Bicknell thrush			May 10	May 13	Sept. 20, Oct. 1	Nov. 8	Apr. 22, May 30, July 10
Olive-backed thrush	tv	c	Apr. 9, 16				
Hermit thrush	tv, sr	c, unc	Mar. 7				
American robin	sr, res	ab, rare				Oct. 23, Nov. 2	Apr. 24, May 19, June 15
Varied thrush							
Wheatear							
Bluebird	sr	c	Mar. 7, 13				

to birds which can only be seen in particular localities; and *irregular*, indicating that the species may be much more common in some seasons than in others. It is sometimes necessary to rank a species under two, or even three heads, as for instance the Junco or Common snow bird, which is an abundant transient visitant in Ontario county, an uncommon winter visitant, and a rare summer resident.

Migration dates given in the third column represent as far as accessible the earliest, average and fairly late dates of arrival of all migratory birds from the south and in the fourth column is recorded the date of departure for the north of all those species which are transient or winter visitants. The fifth column contains the dates at which these species return from the north again; and the sixth column records the dates of departure for the south of transients and summer residents; and the last column for each county indicates whether the species breeds within its borders and, where possible, gives the date when fresh eggs have been found.

Whenever dates are given in these columns the effort has been made to record the earliest, average, and late dates for both migration and nesting, but unfortunately, in spite of the unlimited time which has been expended with this object in view, the result in most counties has been far from satisfactory, yet represents the best that can be done at the present time. In nearly every county it would be possible to insert more complete and accurate dates, both for migration and nesting, than those which appear, from our knowledge of what must be true in those localities; we have considered it far better, however, to adhere to the actual date received and refer those who are in search of fuller dates of migration in different parts of the State, to the schedules for Cayuga, Erie, Lewis, Madison, Monroe, Ontario, Orange, Saratoga, Steuben, Suffolk, Tompkins, Westchester and Yates, where the dates are based on observations extending through a series of years. In cases of rare or accidental birds with only one or two dates for the county, we have entered the date in the column where it seemed most appropriate and have often inserted the year, thereby making the record of greater value.

CLASSIFICATION

Although birds have been studied more than any other class of animals, authorities on classification are still widely at variance in their views as to the proper arrangement of orders, families, genera and species. The difficulty arises from the fact that birds, although so closely related to reptiles that Huxley proposed to unite them in the same class, have nevertheless been so modified in details of superficial structure and in color, that there has been a continual temptation to raise groups into higher positions than correspond to those of equal value in other branches of the animal kingdom. At the same time the differentiation of the various portions of avian anatomy has reached such a high development, on account of the bird's freedom of movement and adaptability to surroundings, that it is sometimes impossible to decide whether a given structure or its absence is due to real relationship or to a parallel development in unrelated forms. Assuming that the different systems of classification are intended to represent, as they should, the real relationship of the different species, it will be evident from a survey of the arrangement of the different orders of birds found in New York State, in the three systems which are best known in America at the present time, how far we are from a complete knowledge or agreement on this subject. It must be borne in mind, however, that no linear sequence of species such as becomes necessary in book writing can possibly show the proper relationship of the families and species. An arrangement like the spreading, dividing and subdividing branches of a tree could be made to show much more accurately their proper relationships. When we consider the difficulty of discovering the complete history of the evolution of birds, on account of the wonderful parallel development which has occurred in many orders and families, and the insuperable obstacles in the way of a linear arrangement, it will be easy to understand the disagreement of authorities on classification. It is certain that a more correct arrangement could be adopted than the classification current

in American ornithology but we have decided to employ it in the present volume, as this is the system most generally familiar here. For the use of those students who do not have access to Sharpe's Hand-List and Ridgway's Catalogue, which unfortunately is not yet completed, we add for comparison the arrangement of the orders of New York birds, numbered in order of sequence, as they appear in the American Ornithologists Union Check-List of 1895, Sharpe's *Hand-List of the Genera and Species of Birds*, and Ridgway's *Birds of North and Middle America*, the latter classification being based principally upon that of Dr Hans Gadow.

Class **AVES**

Subclass **CARINATAE**

ORDER

A. O. U.	SHARPE	RIDGWAY
1 Pygopodes	1 Galliformes	1 Colymbiformes
2 Longipennes	2 Columbiformes	2 Procellariiformes
3 Tubinares	3 Ralliformes	3 Ciconiiformes
4 Steganopodes	4 Podicipedidiformes	4 Anseriformes
5 Anseres	5 Colymbiformes	5 Falconiiformes
6 Herodiones	6 Procellariiformes	6 Galliformes
7 Paludicolae	7 Alciformes	7 Gruiformes
8 Limicolae	8 Lariformes	8 Charadriiformes
9 Gallinae	9 Charadriiformes	9 Cuculiformes
10 Columbae	10 Gruiformes	10 Coraciiformes
11 Raptores	11 Ardeiformes	11 Passeriformes
12 Psittaci	12 Anseriformes	
13 Coccyges	13 Pelecaniformes	
14 Pici	14 Cathartidiformes	
15 Macrochires	15 Accipitriformes	
16 Passeres	16 Strigiformes	
	17 Psittaciformes	
	18 Coraciiformes	
	19 Coccyges	
	20 Piciformes	
	21 Passeriformes	

A comparison of these three systems to show the equivalents of the several orders of our birds, with each order numbered according to its position in each author's classification, gives the following agreement:

GADOW-RIDGWAY	A. O. U. 1895	SHARPE	
1 Colymbiformes	1 (part) Pygopodes (less Alcidae)	4 Podicipedidiformes	Grebes
		5 Colymbiformes	Loons
2 Procellariiformes	3 Tubinares	6 Procellariiformes	Petrels etc.
3 Ciconiiformes	4 Steganopodes	13 Pelecaniformes	Pelicans etc.
	6 Herodiones	11 Ardeiformes	Herons
4 Anseriformes	5 Anseres	12 Anseriformes	Geese etc.
5 Falconiformes	11 (part) Raptores (less Striges)	14 Cathartidiformes	American vultures
		15 Accipitriformes	Hawks etc.
6 Galliformes	9 Gallinae	1 Galliformes	Hens etc.
7 Gruiformes	7 Paludicolae	3 Ralliformes	Rails
		10 Gruiformes	Cranes
8 Charadriiformes	1 (part) Alcidae	7 Alciformes	Auks
	2 Longipennes	8 Lariformes	Gulls
	8 Limicolae	9 Charadriiformes	Plovers etc.
	10 Columbae	2 Columbiformes	Pigeons
9 Cuculiformes	12 Psittaci	17 Psittaciformes	Parrots
	13 (part) Coccyges (less Alcyones)	19 Coccyges	Cuckoos
10 Coraciiformes	11 (part) Striges	16 Strigiformes	Owls
	15 Macrochires	18 Coraciiformes	Kingfishers etc.
	13 (part) Alcyones		
	14 Pici	20 Piciformes	Woodpeckers
11 Passeriformes	16 Passeres	21 Passeriformes	Perching birds

Class **AVES**

Subclass **CARINATAE**

Order **PYGOPODES**

Diving Birds

The Pygopodes (πυγή rump; πούς, ποδός foot) as their name signifies are characterized by the posterior position of the legs, the crura, or "drumsticks," being buried in the general body integument and the heel joint close to the tail. These birds therefore stand, or sit, with the body in a nearly perpendicular position and walk with great difficulty and awkwardness. Palate schizognathous, vomer cleft, maxillo-palatines lamellate, biceps slip present, plumage aftershafted, oil gland large and tufted; sexes alike; the neck and body are elongated, the tarsi compressed, the feet webbed or broadly lobed, the plumage dense, and the body almost entirely incased in a layer of fat. The numerous, long jointed ribs and long sternum form extensive body walls which mostly inclose the internal organs. Hence they are highly adapted to an aquatic life. In fact they pass the greater part of their time in the water and are surpassed by no birds as divers and by none, or few, as swimmers. Wings short, scarcely reaching the base of the tail. The latter short, or rudimentary. Bill horny, with no lamellae and no pouch. Gape large.

The members of this order, comprising the three following families, are famous for their diving powers, poor flight, helplessness on land, and coarse and unpalatable flesh. They are the most aquatic of all our birds and subsist on a diet of fish and other water animals. They nest on the ground or rocks, and the young are ptilopaedic, or covered with down.

Family **COLYMBIDAE**

Grebes

Order Podicipedidiformes in Sharpe's Hand-List

The grebes are a cosmopolitan family of about 30 species characterized by semipalmated and broadly lobed feet; hallux free and broadly lobed;

tarsi compressed, scutellate, the rear edge serrate; nails broad, flat and blunt; tibio-tarsal (heel) joint naked; bill straight or sometimes curved at the tip; a naked strip from the eye to base of bill; tail rudimentary; wings weak, conspicuously concavo-convex; fifth cubital wanting; primary feathers 12 in number, 11 being developed and several emarginate, concealed when closed by the elongated inner secondaries. Like the loons they have a large apophysis of the tibia which renders it difficult to unjoint the knee in the usual manner when dissecting. Carotids single. Eggs often as many as 7 or 9. Young praecocial.

These are the "Hell-divers," or lobe-footed divers, so well known to our youthful gunners. The Western grebe which is not found in New York furnished most of the grebes' breasts so extensively used on ladies' hats and muffs a few years ago. It is a curious fact that a grebe's stomach usually contains, at least during the spring migrations, a compact mass of the bird's own feathers, probably swallowed during the molt. Although grebes can scarcely be called beneficial birds, we can well spare the small fry which they destroy as a return for the lively entertainment which they furnish all visitors to our lakes and bays.

Colymbus holboelli (Reinhardt)

Holboell Grebe

Plate 1

Podiceps holboellii Reinhardt. Vid. Med. 1853. p. 76
Podiceps cristatus and P. rubricollis DeKay. Zool. N. Y. 1844. pt 2, p. 275, 276
Colymbus holboellii A. O. U. Check List. Ed. 2. 1895. No. 2

colym'bus, Lat., a diving bird; *hol'boelli*, in honor of C. Holboell

Description. *Summer plumage:* Upper parts glossy greenish black, feathers on the back edged with grayish; secondaries white with black shafts and brownish tips; throat patch and side of head white, tinged with silvery ash; under parts silvery white, each feather with a dusky shaft and terminal spot, producing a peculiar dappled appearance; front and sides of neck and upper breast deep brownish red; bill black, yellowish at base of lower mandible; iris carmine; crest and ruff rather inconspicuous. *Winter adult and immature:* Crests scarcely discernible; upper parts brownish black; throat, sides of head, and under parts white, mostly without spots; front and sides of neck, and sides ashy; bill yellowish, dusky toward tip.

Length 19–22.25 inches; extent 32–36; wing 7.6–8.12; bill 1.9–2.12; hight of bill at nostrils .55–.58; tarsus 2.5–2.57; middle toe and claw 2.85–3. The maximum dimensions were taken from an adult male killed on the ice on Irondequoit bay, Monroe county, N. Y., February 22, 1904, which is now in the author's collection.

Field marks. The large size of this grebe will distinguish it at once from our other species; and in summer dress the white sides of its head contrasted with the glossy black crown are very conspicuous at shotgun range, and much farther with a strong glass. Its colors in winter bear a general resemblance to those of the Horned grebe, but the cheeks are not so shining white as in that species.

Distribution. The Holboell grebe is a fairly common transient and winter visitant on the coastal and larger inland waters of New York State. In the interior counties it has been taken mostly when driven by winter storms or the freezing of northern lakes to alight in snow banks or small creeks and is then quite helpless and can often be caught with the hands, or killed with a stick. During the winter of 1903–4 many of these grebes were taken in this manner. A large flight was stranded near Utica and Clinton and many of them were killed. Every spring and fall several of these birds are seen on Lakes Ontario and Canandaigua by the writer, and they are reported as not uncommon on all the larger lakes of the State, excepting those of the Adirondack region, and are regular winter visitants on the shores of Long Island. Sometimes they alight on the smaller ponds. Mr Embody reports one from Woodman's pond, Madison county, taken in April 1900, and another taken October 25, of the same year. One was taken by the late David Scott of Springville, N. Y., on Griffith's pond, Erie county, in November 1892.

Migrations. In the autumn this bird arrives in New York about the middle of October and is sometimes seen in winter wherever there is open water, but is more common late in the fall and during the month of April, when those birds which pass farther south return on their northward journey, leaving us by the middle of May for their breeding grounds in the far north and the interior of British America. There is one very early fall record, a

specimen taken at Niagara Falls, September 20, 1903 [*see* Blaine, Auk, 21: 276]. Numerous records from all parts of the State occur from October 20 to April 21. The latest in my notebook is of a specimen seen off Charlotte on Lake Ontario, May 30, 1904.

Haunts and habits. The Holboell grebe is even more a bird of the open water than the Horned grebe and is rarely seen in the shallows and weedy sloughs. It swims and dives with great power when pursued and rises from the surface of the water with the same flopping of its feet as the other grebes, but more often makes a long flight when once under way. Late in the spring it may be seen on our waters in its breeding plumage, and is then a bird of striking appearance [*see pl.* 1].

Colymbus auritus Linnaeus

Horned Grebe

Plate 1

Colymbus auritus Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 135
Podiceps cornutus DeKay. Zool. N. Y. 1844. pt 2, p. 274, fig. 305
Colymbus auritus A. O. U. Check List. Ed. 2. 1895. No. 3

Description. *Breeding plumage:* Crests and ruff conspicuous. Crown, chin and ruff glossy greenish black; lores chestnut; *crests and stripe over eyes buffy*, or brownish yellow; upper parts blackish; *secondaries white;* neck, except the black stripe along the back line, *upper breast and sides chestnut red;* lower breast and belly shining white; bill black, with yellow tip; iris carmine, with inner white ring of beading; feet dusky yellowish on the inside. *Winter and immature:* Crests and ruff consist of only slightly lengthened feathers; upper parts grayish black, darkest on the crown and back of the neck; *sides of the head and under parts silky white*, washed on the foreneck, sides and lower belly with ashy gray.

Length 13.5–15 inches; extent 23–25.5; wing 5.6; culmen .9; hight of bill at nostril .3; tarsus 1.75; middle toe and claw 2.1.

Field marks. The Horned grebe may be distinguished at once from the Holboell grebe by its smaller size, and, in the summer dress, from both our other grebes by its conspicuous buffy crests. In winter dress its shining white cheeks and slim pointed bill are good marks; and when flying also the large square patch in each wing formed by the white secondaries.

Distribution. This bird called also Hell-diver, Pink-eyed diver, Dipper, and Water-witch, is a common migrant in every county of the State. A few remain in winter on our lakes and rivers as long as they are open, and along the coast of Long Island it is fairly common throughout the winter. In the western part of the State it is perhaps commoner than in the east, and for a short time in April and in early November each year it is fairly abundant. According to Mr Reinecke of Buffalo and Mr Davison of Lockport, it has bred on the shore of Lake Ontario where they have seen the old birds with their young, but I have never seen it in the breeding season, nor any eggs of the species collected in the State.

Migrations. The Horned grebe arrives from the south in considerable numbers from March 20 to April 10. After acquiring its nuptial plumage it passes northward to breed, about the middle of May. By the 10th of October it returns from the north and is quite common till the last of November when the greater number has passed farther south.

Haunts and habits. This grebe is found on all the lakes and larger streams of the State as well as on salt water bays and sounds, preferring the open water to the weedy shallows. It swims rapidly, often timing its exertions with a peculiar jerking motion of the neck. When interested or excited its neck is fully extended with the axis of its head at right angles to the straightened neck, and the body nearly submerged. For this reason it is almost impossible to kill a grebe by gunshot unless it chances to be hit in the head or neck. I do not believe it can "dodge the flash of a gun" as is often asserted, when it is in easy range. Even when black powder is used, the bird can be secured with any good gun loaded with no. 10 shot at a distance from 6 to 8 rods. It is a famous diver however. I have often seen it remain under water for three minutes and cover a distance of at least 30 rods at one dive. It is somewhat gregarious in migration time, when a line of 20 or 30 grebes may often be seen swimming abreast at a distance of a few rods from shore. It is quite possible that they are fishing after the manner of mergansers when in this formation, one individual taking more easily the fish which escape from his comrades. Grebes are rarely

seen on land, but this species and the Holboell grebe are sometimes found on the ice when bays and ponds suddenly freeze in winter. They are sometimes found on the snow far inland in an exhausted condition. Indeed it seems quite impossible for a grebe to take flight either from land or water unless a considerable level surface is before it over which to propel itself both by wings and feet while rising.

Podilymbus podiceps (Linnaeus)

Pied-billed Grebe

Plate 1

Colymbus podiceps Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 136
Hydroka carolinensis DeKay. Zool. N. Y. 1844. pt 2, p. 277, fig. 308
Podilymbus podiceps A. O. U. Check List. Ed. 2. 1895. No. 6

podilym'bus, evidently a contraction of podicipes and colymbus; *pŏd'iceps*, an improperly formed word from *podex*, *podicis*, rump, and *pes*, *pedis*, foot

Description. *Breeding plumage:* Upper parts brownish black; front and sides of the neck brownish gray, with concealed dusky mottlings; a large *black throat patch;* under parts silvery ash, obscurely mottled with blackish, especially on the breast and sides; *bill short and thick*, dull bluish white, with a black band near the middle; eyelids white; iris brown and white; feet greenish black, lead color on the inside. *In winter:* Bill dusky yellowish, with no band; throat whitish, without the black patch. *Young:* Striped with white and buffy about the head.

Length 12–14 inches; extent 22–24.5; wing 4.5–5; bill .85; hight of bill at nostrils .4; tarsus 1.5; middle toe and claw 2.15.

Field marks. This bird has a more brownish cast than our other grebes, but the best mark at all seasons is the shape of its bill, which is short and thick--more henlike. In the breeding season the black throat patch and band on the bill are distinctive, while in winter it lacks the shining white cheeks of the Horned grebe, which is our only grebe liable to be confused with the present species.

Distribution. This bird, called also Dabchick, Hell-diver, Dipper, Didapper, and Water-witch, is found throughout New York during the breeding season, whenever it is undisturbed in its favorite haunts. I have noticed it breeding on the marshes of Seneca river, on the bays of Lake Ontario near Rochester, on Canandaigua and Keuka lakes and on

Elk lake near Mt Marcy in the Adirondacks. It has been recorded as a summer resident by Giraud on Long Island; Merriam, in Lewis county; Mearns in the Highlands; Davison in Niagara county; Chapman near New York; Short in western New York, and Fisher at Ossining. It is also reported by correspondents as breeding in Cayuga, Erie, Monroe, Ontario, Orleans, Yates, Onondaga and Fulton counties. It is, however, much less commonly distributed through the State, than formerly, before so many marshy ponds and streams had been drained and our lakes and streams frequented by fishermen and pleasure seekers. During the spring and autumn it is found on all the waters of the State. It is a species of wide distribution in America, ranging from Argentina to Hudson bay.

Migrations. This grebe is a rare winter bird in the southern part of the State, but is mostly a migratory species arriving from the south about the 6th of April in the vicinity of New York and from the 23d of March to the 15th of April in Monroe county and other parts of western New York. Migrants have passed to their breeding grounds from the 1st to the 15th of May and return from the north again the last of August to September 15th. The greater number have departed to the south by the first of November, but an occasional straggler is sometimes found in December and January. I have seen one which was captured in a barnyard watering trough during the first week of February, when the mercury was below zero and the ground was deeply covered with snow.

Haunts and habits. Marshy lakes, ponds and bays and sluggish streams bordered with flags and grown over with pondweed, water crowfoot and eelgrass are the favorite haunts of this species. Here it makes its nest and rears its young. When approached, it sinks gradually out of sight by compressing or expelling the air from its lungs and air sacks or dives with a quick motion of the neck and legs, and swims rapidly beneath the surface to reappear some distance from where it disappeared, or rising among the weeds remains invisible, sometimes with only its nostrils above the water beside some stick or plant, thus completely evading its pursuers. It is rarely found in the open deep water where our other grebes find their

principal subsistence. The note of this bird is a resonant call reminding one somewhat of the Yellow-billed cuckoo note, composed of the syllables cow—cow—cow—cow—cow—cow—cow, repeated several times, the latter syllables being drawn out into froglike gutturals. This is one of the most characteristic sounds of the marshes comparing well with the booming of the bittern and the clattering of the rails as a sound with which all nature lovers should be familiar. It is undoubtedly the love note of the bird, but is sometimes heard during the pleasant days of the fall.

Nest and eggs. The Pied-billed grebe forms its nest of flags and reeds among the thick sedges or cat-tails, but sometimes in a rather exposed position. It usually rests on submerged weeds or rubbish, but sometimes floats on the surface, only slightly anchored to the surrounding stems, and has been known to float away in times of flood with the mother bird incubating her four to eight dull white eggs on her rudely constructed house boat. When the old bird leaves the nest in search of food she usually covers the eggs with weeds, probably to protect them from gulls and other egg-loving birds. The eggs are 1.75 inches in length by 1.2 in width. The young swim as soon as hatched.

Family GAVIIDAE

Loons

Order Colymbiformes in Sharpe's Hand-List

Bill straight, sharp, strong, horny and paragnathous; wings strong; primaries 11, 10 being well developed, none emarginate; secondaries numerous, short, the fifth wanting; tarsi much compressed, reticulate, smooth on the rear margin; feet palmate; hind toe partly lateral and connected with inner toe by a lobe; claws normal; tail of 18–20 short, stiff feathers; tibia has a long apophysis; patella small; carotids double; coeca and ambiens present; body broad and flattened; back spotted.

Loons are admirably adapted to the avocation of divers. The form is long and pointed for cleaving the water, the tarsi so narrow that they offer little resistance to forward movement of the legs, and the broad webbed feet take a powerful hold of the water at the backward stroke. They also can change their specific gravity by inhaling or expelling air from their lungs

and air sacs. They make their nests on the ground near the water's edge, and the eggs are two, of an elongated oval, olive or brown in color with spots of brown and blackish. The young are covered with a sooty grayish down, changing to white on the belly. They swim about as soon as hatched. The family consists of only five species, all confined to the holarctic realm.

Gavia immer (Brünnich)

Common Loon

Plate 2

Colymbus immer Brünnich. Ornithologia Borealis. 1764. p. 38
Colymbus glacialis DeKay. Zool. N. Y. 1844. pt 2, p. 285, fig. 299
Urinator imber A. O. U. Check List. Ed. 2. 1895. No. 7

ga'via from the Italian name of a gull, first applied to loons by Forster in 1788; *immer* from the Swedish *immer* and English *ember*, or *immer*, used in composition with goose for this bird, Ember goose

Description. *Summer plumage:* Head and neck rich greenish black, with purplish reflections; *small patch of shining white streaks on throat, and a larger one on each side of neck*, consisting of raised edges of the feathers so that the streaks may be felt as well as seen; *upper parts black, with a pair of white spots on each feather*, those on the back and scapulars being square, or rectangular, the others oval; under parts pure white; sides of upper breast sharply streaked with black; a dusky band across the belly; bill black, sometimes tipped with yellowish; iris red; feet blackish. *Winter and immature:* Upper parts dusky brown, the feathers edged with grayish; crown and back of neck blackish; sides of head and neck white mixed with grayish; under parts white.

Length 31–36 inches; extent 52; wing 12.5–14.25; culmen 2.75–3; gape 4–4.25; hight of bill at nostrils .75–.85; tarsus 3–3.5; middle toe and claw 4.25–5. Females and young have the smaller dimensions, the bill of young especially, being considerably smaller than that of adult.

Distinctive marks. As shown by plate 2, the Common loon may easily be distinguished in breeding plumage from the Red-throated and Black-throated loons by the marked difference in coloration of its head and neck. In winter plumage, the feathers of its upper parts are *margined* with grayish, while those of the Red-throated loon are *spotted* with white, and the Black-throated loon is decidedly smaller. The bills of the Black-throated and Common loons are very similar in shape, but that of the

Red-throated species is more slender and is slightly concave in the region of the nostrils, which gives it the appearance of being tilted upward from the base. This difference in the bills of our two common species serves as an excellent field mark by which, with the aid of an eight power glass, I have been able to identify the Red-throated loon at the distance of half a mile.

Distribution. This holarctic species, called also Great northern diver, Diver, Big loon, Ember goose, is a common transient visitant on all large bodies of water within New York State, and is often found throughout the winter on the larger lakes and along the shores of Long Island. In 1824, according to Audubon, it was breeding on Cayuga lake, and in 1844, according to DeKay, on Raquet lake. Roosevelt and Minot record it as common in Franklin county up to 1870. Merriam, in 1881, called it a common summer resident of the Adirondack region, and in 1883 found it fairly common at 1st Lake, where a nest with partly incubated eggs was found on June 10th. According to Davison it formerly bred on the southern shore of Lake Ontario, but I have been unable to find satisfactory evidence of its nesting there in recent years. As a summer resident it is now confined to the secluded ponds and lakes of the Adirondacks, being most numerous in the western and southwestern parts of that region. During the summer of 1905, we failed to find it on any of the waters in Essex county, but a few were met with in Franklin, St Lawrence, Herkimer and Hamilton counties, where they still breed. Mr L. L. Merriam writes that it is still a common summer resident on many lakes north of Beaver River.

Migrations. The spring migration of the Common loon begins the first of April in the southern and western portions of the State. It becomes quite common by the middle, or third week of April, and is often seen migrating by day at a considerable elevation, either singly, or in small companies of 6 to 15. On one occasion the writer saw 26 of these birds passing over Canandaigua lake in a scattered company steering toward Lake Ontario. According to Dutcher they leave Long Island in June. They are often seen on Lake Ontario and the larger inland lakes as late as the 20th of June, but by far the larger portion have passed on to their breeding grounds by

the third week in May. They begin to return from the north about the middle of September, and are quite common during October, most of them passing southward by the last of November, many going as far southward as the Gulf of Mexico.

Haunts and habits. The Common loon is rarely seen on ponds of less than several acres extent and is never common except on the larger rivers and lakes where it keeps to the open water and escapes from its pursuers by diving and swimming long distances under water. In this manner it can elude the swiftest oarsman, but when cornered in shallow water, it takes wing and makes a long flight before alighting. Like grebes, it often sinks as if a stone were fastened to it and seems to disappear completely, probably rising with only its bill out of water and so remaining until its pursuers have given up the chase. It is asserted by the best authorities that this bird can evade a gunshot by diving at the flash, and I have no doubt that this is true when black powder is used, but when a modern smokeless rifle is discharged at a loon, he is utterly unable to dodge the shot, even when intently eyeing the gunner all the time. When on land the loon is a very awkward fellow, as his name would indicate, it being derived from the old English loom, or lumme, meaning a clumsy fellow or lummox, and probably allied to the word lame. He stands with his body erect and his tarsi usually resting on the ground. Perhaps it would be more correct to say he sits up like a startled woodchuck. He can not walk, but progresses by tumbling forward and flopping his wings and pushing his feet in a most ungainly manner. The scream of the loon, uttered at evening, or on the approach of a storm, has to my ear, an unearthly and mournful tone resembling somewhat the distant howl of a wolf. It is a penetrating note, loud and weird, delivered with a prolonged rising inflection, dropping at the end, resembling the syllables *a* $^{oo\acute{o}}$ *oo*, or as is often written *o′-ō-ōōh*. Its laughter, however, is of a more pleasing quality, like the syllables *hŏŏ*, *hŏŏ*, *hŏŏ*, *hŏŏ*, *hŏŏ*, uttered in a peculiarly vibrating tremulo.

Food. The food of the loon consists almost entirely of fish, which it catches by swimming after them beneath the surface of the water.

Nests and eggs. This bird lays its eggs close to the margin of the lake where it can easily slide into the water at the approach of danger. The nest is a mere depression in the rock or ground and its eggs, usually two in number, are about the size of a goose egg, grayish olive-brown in color, spotted with brownish black. The young are covered with a soft down, sooty brown in color and leave the nest as soon as hatched. The time for fresh eggs is from May 15 to June 5.

Gavia arctica (Linnaeus)

Black-throated Loon

Plate 2

Colymbus arcticus Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 135
Urinator arcticus A. O. U. Check List. Ed. 2. 1895. No. 9

arc'tica, arctic

Distinctive marks. This bird bears a general resemblance to the Common loon, but is smaller. In summer the *upper part of the head and back of the neck is of a clear bluish gray*, gradually fading into *black on the throat and foreneck*. The white streaks on the sides of its neck form a *lengthwise* patch, and the *white spots on its upper parts are more confined to restricted areas* as shown in the plate. In *winter*, there is a much closer resemblance, but the Black-throated diver has a much wider edging of bluish gray on the feathers of its upper parts, which gives it a peculiar "reticulated or scaly appearance."

Length 27–30 inches; wing 12–13; culmen 2.4–2.5; gape 3.4; hight of bill at nostril .65; tarsus 2.9.

This arctic species is extremely rare in New York, the only specimen from this State known to exist is recorded by Dutcher in the *Auk*, volume 10, page 265. "The bird was killed by Gus Merritt of City Island, L. I., on Saturday morning, April 29, 1893, between Sands Point lighthouse and Execution lighthouse. He was one of a party of young men who left City Island in the middle of the night to lie in line for ducks. At daylight on Saturday morning the bird flew from the east and was killed by him as it passed over his boat." It was a male in full plumage.

According to Mr F. S. Webster, he once saw a female of this species which had been shot by a gunner on the Hudson river near Troy, N. Y. The first United States record which has come to my notice, is of the specimen which was shot in Sandusky Bay, Ohio, in 1880, *see* Wheaton's *Birds of Ohio*, page 565. There are three records for Lake Ontario, near Toronto. A pair from this locality was sent to the Paris Exposition and a third specimen was captured off Mimico, May 22, 1889, recorded by Fleming [Auk, 17: 176].

Lawrence, in 1866 included this species in his list of *Birds of New York and Vicinity*, but there is no specimen in his collection.

Gavia stellata (Pontoppidan)

(Gavia lumme on plate)

Red-throated Loon

Plate 2

Colymbus stellatus Pontoppidan. Danske Atlas. 1763. 1:621
Colymbus septentrionalis DeKay. Zool. N. Y. 1844. pt 2, p. 286, fig. 300
Urinator lumme A. O. U. Check List. Ed. 2. 1895. No. 11

stellā́ta, Lat., starred or spotted

Description. Summer plumage: Crown and back of the neck black with greenish gloss; back of neck and sides of breast sharply streaked with white; upper *throat and sides of head and neck bluish gray*; a long triangular *patch of chestnut on throat;* upper parts brownish black spotted with white; breast and belly white; lower belly and longer tail coverts dusky; bill and feet blackish; iris red. *Winter and immature:* Crown and back of neck ashy gray; upper parts dusky grayish profusely spotted with white; no throat patch; under parts white; the bill of female and young considerably more slender.

Length 25 inches; extent 44; wing 11.5; culmen 2; gape 3; hight of bill at nostril .5; tarsus 2.75.

Distinctive marks. *See* remarks on Common loon, page 99, 100; also plate 2.

Distribution. The Red-throated loon, Red-throated diver, Sprat loon, or Scape-grace, is fairly common along the shores of Long Island and Lake Ontario. It occurs principally as a transient visitant, but is often found

throughout the winter. On the smaller lakes it is occasionally seen, but must be regarded as decidedly less abundant than the Common loon. DeKay and Giraud considered it as comparatively rare; Rathbun and Chapman as fairly common, while the other local lists have recorded it as a rare, or uncommon species. I have frequently observed it on Canandaigua lake, and on Lake Ontario off the Charlotte harbor where it is sometimes decidedly common. In severe winters when the lake freezes, these birds like the grebes, are often taken unawares and left stranded on the ice apparently unable to rise, and flounder over the ice and snow in a helpless condition till they are either captured or die from exposure. On January 10th, 1885, a bird in this condition was captured by two wood choppers at Adams Basin. On December 22, 1903, another specimen under very similar conditions was taken in Bergen swamp, 18 miles south of Lake Ontario, and in February of the same year a specimen was captured on the ice and brought to the Park Aviary in Rochester.

This is a holarctic species breeding from Scotland, New Brunswick, and Manitoba to high latitudes, and migrates southward in winter nearly as far as the Common loon.

Migrations. The late David Bruce of Brockport, stated that he had found this bird on Lake Ontario during every month of the year. It is mainly a transient visitant, however, arriving from the north from September 19 to the last of October and passing southward about the first of December. The few which remain all winter are joined by spring migrants the latter part of March, the greater number of these passing on to their breeding grounds in the north before the first of June. Like many of the waterfowl, however, this loon is often found loitering on the lake long after the breeding season has begun, but there is not the slightest evidence to my knowledge of its ever nesting within our borders. Mr George F. Guelf of Brockport reports specimens taken June 13, 1899 (♂); June 22, 1899 (♀); and July 17, 1896 (in molting plumage).

Family **ALCIDAE**

Auks, Guillemots etc.

Order Alciformes in Sharpe's Hand-List

Feet palmate, hind toe wanting; tarsi mostly reticulate, heel joint naked; bill variable, in some species curiously enlarged, and ornamented in the breeding season; tail short, of 12–16(rarely 18)feathers; lores feathered; oil gland tufted; no apophysis of tibia; altricial, i.e. their young are fed in the nest by their parents; ptilopaedic, or mostly covered with down; nidicolous, i.e. remaining in the nest for some time; eggs one, or few, very large.

This is a family of holarctic distribution, consisting of about 30 members, almost exclusively maritime in habitat. They are highly gregarious in the breeding season and return with great punctuality to their nesting sites on the precipitous cliffs and ledges of northern shores. Famous breeding grounds are the Hebrides and other islands of Scotland, Norway, Iceland, Greenland, Labrador, Alaska, and Bird Rock in the St Lawrence gulf. The southernmost breeding stations in eastern America are on the coast of Maine. The eggs are of commercial value and are gathered in immense numbers on the rocky islands of Great Britain and Norway.

Fratercula arctica (Linnaeus)

Puffin

Plate 3

Alca arctica Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 130
Mormon arcticus DeKay. Zool. N. Y. 1844. pt 2, p. 282, fig. 301
Fratercula arctica A. O. U. Check List. Ed. 2. 1895. No. 13

fratĕr'cula, from Lat. *fraterculare*, to swell up, probably from the pouting appearance of standing puffins, somewhat resembling the attitude of pouter pigeons; *arc'tica*, arctic

Description. *Bill extremely deep. Adult:* Head, neck and upper parts blackish, the head and front of the neck browner; sides of the head, throat and a narrow collar on the nape white or grayish; breast and belly white. *Breeding plumage;* Bill much enlarged and brilliantly colored; feet and eyelids orange-red; a bluish conical projection on the upper eyelids; less white on the neck. Length 13 inches; wing 6; tarsus 1; bill 1.85; depth of bill in winter 1.5.

The Puffin, Sea parrot or Tinker is recorded by Giraud, DeKay, Lawrence and Chapman as a rare winter visitant to the shores of Long Island. Mr L. S. Foster reported a specimen from Center Moriches, Suffolk county, December 15, 1882; and Dr Braislin, from Montauk, March 30, 1902 [*see* Auk 20: 50]. The southernmost breeding station of this species is on the coast of Maine, and it rarely migrates further south than the shores of Cape Cod.

Cepphus grylle (Linnaeus)

Black Guillemot

Plate 3

Alca grylle Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 130
Uria grylle DeKay. Zool. N. Y. 1844. pt 2, p. 278, fig. 303
Cepphus grylle A. O. U. Check List. Ed. 2. 1895. No. 27

cĕpph'us, Gr. κέπφος, some sea bird; *gryl'le*, Swedish for this bird

Description. *In winter:* Upper parts blackish, all the feathers tipped with white giving a *marbled appearance;* lesser wing coverts, terminal half of greater coverts and lining of the wing white, the white coverts forming a *large white patch;* under parts white. *Young:* Similar, but the under parts mottled with black. *Breeding plumage:* Sooty black with greenish reflections above; wings as in winter. Length 13 inches; wing 6.25; bill 1.2; tarsus 1.25.

The Black guillemot, sometimes called Sea pigeon is an uncommon winter visitant south of Cape Cod. It is mentioned without definite records by Giraud and DeKay, and is certainly very rare in this State. There is one specimen from the Lawrence Collection, labeled "Long Island" in Mr Dutcher's collection, number 1959. The late David Bruce of Brockport, N. Y., writes that he has several times picked up the wings of this species in the winter drift on the shore of Lake Ontario, and that a specimen in the mottled plumage was taken on Lake Ontario in February, 1888, by Mr Skillen of Troutberg.

Cepphus mandti (Lichtenstein)

Mandt Guillemot

Distinctive marks. Like the Black guillemot, but the *greater wing coverts are white to their base*, whereas C. grylle has at least the basal half of the greater coverts black, sometimes showing as a black line between the white of the greater and lesser coverts.

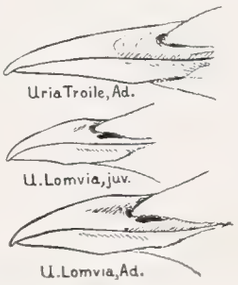
This holarctic species is more northern in distribution than the preceding, and rarely wanders farther south than Maine or Massachusetts. It breeds on Hudson bay, and Mr Fleming and others believe that the guillemots which are rarely taken on Lake Ontario are of this species. The late David Bruce has labelled a pair of Cepphi in the Mechanics Institute Collection in Rochester "Lake Ontario," but his notes do not indicate that he actually took them on Lake Ontario. He does state however that he has found their remains on the lake shore in the spring drift.

Uria troile (Linnaeus)

Murre

Distinctive marks. Similar in color to Brünnich murre but in breeding plumage the top of head and hind neck smoky brown; *depth of bill at angle less than one third the culmen. See* figure.

The Common murre is confined to the north Atlantic, and migrates as far as southern New England in winter, but among the scores of murres from New York which I have examined no specimen of troile can be found. DeKay, Giraud and Lawrence record this species from New York, as many later observers have done, but the records probably refer to young lomvia. It is a strange fact that no specimen of troile from New York can be secured but the conclusion must be that it does not migrate as far south as lomvia, or that our specimens of lomvia are from Hudson bay and the Arctic ocean.



Bills of murres ½ nat. size

Uria lomvia (Linnaeus)

Brünnich Murre

Plate 3

Alca lomvia Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 130
Uria lomvia A. O. U. Check List. Ed. 2. 1895. No. 31

u'ria, Gr. οὐρία, some diving bird; *lom'via*, Faroese name

Description. *In winter:* Upper parts, wings and tail black; tips of secondaries and under parts white; *throat* and *sides of the neck mixed with grayish white. Breeding plumage:* Head and neck sooty black, the front of the neck browner. Length 16.5–16.8 inches; extent 30–31; wing 8.4; bill 1.25; depth of bill .48; tarsus 1.3; middle toe and claw 1.7. Young birds have smaller bills.

This species, known also as the Thick-billed guillemot, is the commonest member of the Auk family on the waters of New York State, and seems to be growing commoner in recent years, especially in the interior of the State, where it has been almost a regular winter visitant on the larger lakes for several years. Most of the specimens taken in the interior have been emaciated and evidently unable to obtain food, but some were able to survive till spring, and possibly would have returned to their breeding

grounds. This bird has been mistaken for U. troile so often that we would call attention to the relative dimensions of the two species, specially of the bills, [*see* figure]. The principal records of specimens examined follow:

Auburn, N. Y. Jan. 4, 1854. (William Hopkins). Dr Brewer, Bost. Soc. Nat. Hist. Proc. 1856. 5: 13
Lawrence, N. Y. List. 1866
Amagansett, L. I. Dec. 1, 1883. (Lawrence). Dutcher, Long Island Notes
South Oyster Bay, L. I. Winter 1884. (Verity). " "
Smith's Point, L. I. Mar. 23, 1884. (Albin). " "
Rockaway Beach, L. I. Feb. 20, 1884. (Weston). " "
Coney Island, L. I. Jan. 21, 1884. (Bebeusee). " "
Bellport, L. I. Feb. 2, 1884. (Monsell). " "
Smith's Point, L. I. Jan. 30, 1884. (Albin). " "
Southampton, L. I. Jan. 31, 1884. (Phillips). " "
Ditch Plain, L. I. Jan. 5, 1884. (Stratton). " "
Smith's Point, L. I. Jan. 19, 1884. (Albin). " "
Amagansett, L. I. Jan. 17, 1884. (Barnes). " "
Southampton, L. I. Jan. 15, 1884. (Burnett). " "
Shinnecock bay, L. I. Jan. 8, 1884. (Carter). " "
Montauk Point, L. I. Jan. 4, 1884. (♂). " "
Atlanticville, L. I. Dec. 29, 1884. (Vail). " "
Shinnecock bay, L. I. Jan. 27, 1885. (Carter). " "
Atlanticville, L. I. Feb. 15, 20, 1885. (Pairs seen 5 miles off. Vail). Dutcher
Springs, L. I. Dec. 1892. (2). (Parsons). Dutcher
Far Rockaway, L. I. Jan. 1, 1891. (Howell, c). "
" Jan. 7, 1891. (Frazer). "
Montauk, L. I. Jan. 1891. (Scott, nos. dead). "
Miller's Place, L. I. Winter 1891. (Helme, nos.). "
Shelter Island, L. I. Jan. 8, 17, 1891. (2 ♀). Worthington, Auk. 1885. 2: 39
Lake Champlain, N. Y. Dec. 1893. (Numerous). Fleming, 4th Internat. Ornith. Cong. Proc. p. 520
Lake George, N. Y. Dec. 12, 1893. (2). A. K. Fisher
Ossining, N. Y. Dec. 11, 1894. A. K. Fisher
Baldwinsville, N. Y. Dec. 15, 1893. W. M. Beauchamp
Booneville, N. Y. Dec. 5, 15, 25, 1894. Auk, 12: 177
Roslyn, N. Y. Dec. 24, 1894. S. H. West
Buffalo, N. Y. Nov. and Dec. 1894. Savage
Pleasant Valley, Dutchess co., N. Y. Dec. 1894. Horton
Utica, N. Y. Dec. 24, 1894. Auk. 12: 177; 14: 226

Carmel, Putnam co., N. Y. Dec. 1895. (5). W. A. Mead
Ithaca, N. Y. Dec. 14, 1895. (H. G. Wilson). Dr H. D. Reed
" Dec. 16, 1895. Cornell Univ. Coll.
Lake Ontario, N. Y. Dec. 17, 1895. George F. Guelf
Johnstown, N. Y. Winter 1894-95. Auk, 12: 290
White lake, Oneida co., N. Y. Dec. 13, 1895. Fleming, 4th Internat. Ornith. Cong. Proc. p. 532
Seneca lake, N. Y. Dec. 23, 1895; May 1896; Dec. 26, 1896; nos. winter 1896. Chapman, Auk, 14: 202
Niagara Falls, N. Y. Dec. 23, 1896. Fleming, 4th Internat. Ornith. Cong. Proc. p. 533
Penn Yan, N. Y. Dec. 20, 1896. Verdi Burtch
Canandaigua, N. Y. Dec. 20, 1897. A. P. Wilbur
Murray, Orleans co., N. Y. Mar. 1897. Posson, Auk, 16: 193
Monroe co., N. Y. Several specimens mounted at Ward's. Truman R. Taylor
Ithaca, N. Y. Winter 1899. L. A. Fuertes
" Nov. 27, 1899. (♀). Cornell Univ. Coll. 3099
Lake Ontario, Monroe co., N. Y. Dec. 4, 1899. George F. Guelf
Rochester, N. Y. Nov. 27, Dec. 2, 1900. (4). E. H. Eaton
Chateaugay lake, Clinton co., N. Y. Dec. 24, 1900. Shattuck, Auk, 18: 199
Lake Earlville, Madison co., N. Y. Nov. 26, 1900. G. C. Embody
Lowville, Lewis co., N. Y. Nov. 29, 1900. Miller, Auk, 18: 188
Redwood, Jefferson co., N. Y. Dec. 4, 1900
Rockaway, N. Y. Dec. 2, 1900. Fleming, 4th Internat. Ornith. Cong. Proc. p. 536
Erie co., N. Y. Dec. 14, 1900. James Savage
Ithaca, N. Y. Dec. 19, 1901. Cornell Univ. Coll.
Cayuga, N. Y. 1900–Apr. 1903. (3). Foster Parker Collection
Sag Harbor, L. I. Dec. 6, 1901. Braislin, Auk, 20: 51
Rockaway Beach, L. I. Dec. 26, 1901. " "
Amagansett, L. I. Dec. 30, 1901; Mar. 2, 1902. Braislin, Auk 20: 51
Fair Haven, N. Y. Dec. 11, 1902. L. O. Ashbury
Newton Falls, N. Y. Dec. 17, 1903. "
Waterford, N. Y. Feb. 25, 1904. State Museum Collection
Lake Ontario, Monroe co., N. Y. wv, oc. David Bruce
Rockaway, L. I. Dec. 14, 1902
Blooming Grove, Rensselaer co., N. Y. Dec. 5, 1901. State Museum
Long Island, N. Y. wv "Regular in recent years." Braislin, Lin. Soc. N. Y. Proc. 1907. p. 34
Cincinnatus, Cortland co., N. Y. Dec. 2, 1907. (1 shot). H. C. Higgins
Hudson river, near Albany, N. Y. Dec. 1907. (2 shot)

Alca torda Linnaeus

Razor-billed Auk

Plate 3

Alca torda Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 130
DeKay. Zool. N. Y. 1844. pt 2, p. 283, fig. 304
A. O. U. Check List. Ed. 2. 1895. No. 32
al'ca, Icelandic *alka*, auk; *tor'da* from *tord* the name of the bird (Coues)

Description. *Breeding plumage:* Head, neck and upper parts black, deep brown on the sides of head and throat, sunken line of white from the eye to base of bill; tips of secondaries and under parts white; bill and feet black, the bill ringed with white. *Winter and young:* Duller, more white on neck.

Length 16–18.5 inches; extent 25–27; wing 7.75; tail 3.5; graduated about 1.25; bill 1.3, greatest depth of bill .9; gape 2.25; tarsus 1.25; middle toe and claw 2. Young smaller than adults, with slender bills.

The Razor-bill, or Tinker, inhabits the coast of the north Atlantic, on the American side, breeding from Grand Manan and the Magdalens to high latitudes. It is an uncommon winter visitant on the shores of Long Island, and purely accidental on our inland waters. Most of the specimens taken have been found dead or exhausted on the shore. The principal dates are as follows:

Center Moriches, L. I. Mar. 5, 1878. Collection of Robert Lawrence. Dutcher, Long Island Notes
Southampton, L. I. Jan. 15, 1884. Dead. (Burnett). Auk, 2: 38. Dutcher, Long Island Notes
Smith's Point, L. I. Feb. 2, 1884. Dead. (Albin). Auk, 2: 38. Dutcher, Long Island Notes
Southampton, L. I. Feb. 6, 1884. Dead. (Green). Auk, 2: 38. Dutcher, Long Island Notes
Amagansett, L. I. Nov. 25, 1884. (Edwards). Dutcher, Long Island Notes
Bellport, L. I. Feb. 2, 1885. (W. E. T. Smith). " "
Quogue, L. I. Dec. 2, 1885. ♂ (Jessup). " "
Montauk Point, L. I. Dec. 3, 1886. (Scott, c off the point). Dutcher, Long Island Notes
Montauk Point, L. I. Dec. 10, 1886. (Helme, "Active wave"). Dutcher, Long Island Notes
Sag Harbor, L. I. Dec. 10, 1886. (2). (Helme). Dutcher, Long Island Notes
Southold, L. I. Jan. 26, 1887. (Worthington). " "

Ditch Plain, L. I. Dec. 1887. (Stratton). Dutcher, Long Island Notes
Montauk, L. I. wv, oc. (10–15 flocks). (Scott). " "
Montauk Point, L. I. Jan. 6, 1887. L. S. Foster
Gardiners Island, L. I. Jan. 20, 1890. Dead. (Lester). Dutcher
Saratoga lake, N. Y. Nov. 26, 1893. (2 taken). S. R. Ingersoll; A. S. Brower
Montauk Point, L. I. Nov. 14, 1901. Braislin, Auk, 20: 51
Rockaway, L. I. "Regular," Nov. 2–Feb. 6. Braislin, Lin. Soc. N. Y. Proc. 1907. p.34

Alle alle (Linnaeus)

Dovekie

Plate 3

Alca alle Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 131
Mergulus alle DeKay. Zool. N. Y. 1844. pt 2, p. 280, fig. 302
Alle alle A. O. U. Check List. Ed. 2. 1895. No. 34

al'le, Swedish name of this bird

Description. *Summer plumage:* Head, neck and upper parts sooty black, the front of the neck and breast browner; secondaries tipped with white and the scapulars streaked with the same; belly white. *Winter and immature:* Similar, but the throat whitish, and sometimes a grayish collar on the neck. Length 8 inches; wing 4.5; bill .5; tarsus .7.

This little bird, called also Sea dove, Sea pigeon, Greenland dove and Ice bird, is an irregular winter visitor to the shores of Long Island and New York bay. Specimens are found on the shore nearly every winter, dead or in an exhausted condition. Off the coast it is frequently observed from the decks of passing steamers. Like the Brünnich murre it sometimes straggles up the St Lawrence to Lake Ontario. There is one record for Toronto, November 18, 1901 [*see* Ames, Auk, 19: 94]. The only specimen which I have found from the interior of New York State was picked up in a garden at Sweden, about 15 miles from Lake Ontario and died soon after being found. The following records in recent years are worthy of note:

Long Island. oc, wv. Giraud List. 1844. p. 375
New York State. Rare on coast. DeKay List. 1844. p. 281
New York and vicinity. Occurs. Lawrence List, 1866
Center Moriches, L. I. Jan. 10, 1878. (R. B. Lawrence). Forest and Stream, 10: 235
" Jan. 11, 1878. Berier, Forest and Stream, 10: 37
West Neck creek, L. I. Nov. 18, 1879. ♂. (Worthington). Dutcher, Notes
Center Moriches, L. I. Dec. 23, 1881; Nov. 1882. Dutcher, Auk, 1: 35
Bayport, L. I. Nov. 1882

Fire Island Light, L. I. Dec. 7, 1882. ♀
Long Island. Nov. 25, 1884; Feb. 6, 1884. Dutcher Collection
Sag Harbor, L. I. About 1884. (Several dead. Lucas and Buck). Dutcher, Notes
Amagansett, L. I. Nov. 1885. (Byram). Dutcher, Notes
" Mar. 24, 1884. Dutcher, Auk, 2: 38. Braislin, Lin. Soc. N. Y. Proc. 1907. p. 34
Montauk, L. I. Sept. 8, 1886. A. H. Helme
Outer beach, L. I. Nov. 23, 1891. (2). (R. B. Lawrence). Dutcher, Notes
L. I. Nov, 28, 1891. ♂. (W. W. Wilson). "
Freeport, L. I. Account of 1 taken by C. H. Scott. "
L. I. Dec. 6, 1891. Account of ♂ taken. (Frazer). "
L. I. Dec. 8, 1891. 1 seen by and 3 reported. (N. T. Lawrence). Dutcher
Jamaica bay, L. I. About Dec. 18, 1891. (C. Glier). Dutcher, Notes
Sweden, Monroe co., N. Y. Nov. 1892. David Bruce
Montauk, L. I. Nov. 27, 1893. (3). (Scott). Dutcher, Notes
Ossining, N. Y. Av. (2)
" Dec. 5, 1898. Dr A. K. Fisher
Amagansett, L. I. Dec. 14, 1901. (2). Braislin, Auk, 20: 51
Babylon, L. I. Jan. 15, 1903. Burtis, Auk, 20: 209
New York, N. Y. Often found dead, 1900. L. S. Foster
Hither Plain, L. I. Dec. 31, 1906. (Baker). Braislin, Auk, 24: 186–87

Order LONGIPENNES

Long-winged Swimmers

Order Lariformes, Sharpe's Hand-List

Wings long and pointed; nostrils *lateral and open;* hallux small (sometimes rudimentary), free and elevated; tail usually long, of 12 feathers; primaries 11, only 10 developed; fifth secondary wanting; legs comparatively free and inserted near middle of body; tarsus partly scutellate, otherwise reticulate; tibiae bare for a short distance; front toes palmate; palate schizognathous; no basipterygoids; nasals *schizorhinal;* 15 cervicals; furcular hypocleidium present; syringeal muscles one pair; esophagus capacious; cloaca large; plumage aftershafted; oil gland tufted; eggs few, usually 3; ptilopaedic, altricial and nidicolous in nature; mostly piscivorous in diet; cosmopolitan in distribution; maritime, lacustrine or fluviatile in habitat; shrill or raucous in voice; volucral in habit.

This order resembles most nearly the tube-nosed swimmers of all the natatorial birds, but the character of the nostrils easily distinguishes them without reference to internal anatomy. The pterylosis and osteology of the group also show some affinity to Limicolae and Alcidae.

Family **STERCORARIIDAE**

Skuas and Jaegers

Bill epignathous, the tip of the upper mandible being decidedly curved and furnished with a *distinct nail* or dentrum; a *horny cere* is saddled over the opening of the nostrils; claws strong, sharp, and curved; primaries stiff and rounded; *central tail feathers* more or less *elongated;* coeca much larger than in other Longipennes; sternum with only a single notch on each side instead of two as in Laridae. There is also a general tendency to a sooty blackish coloration of the upper parts in the adult, to a gilding of the head and hind neck, and to a whitening of the shafts of the flight feathers toward their bases; while the young in all are noticeably smaller than the adults and profusely waved or streaked with rufous, requiring years to reach the full dimensions and plumage of the adult. In habit the skuas or jaegers are dashing, intrepid and predatory, strong and vigorous of body and wings. Armed with beak and claws which mimic the birds of prey, they harass their weaker brethren of the gull family and compel them to drop, or disgorge, their prey which is snatched up with great dexterity. This habit has given them the names in common use among sailors—jaegers (hunters, sea-hawks, teasers, boat swains, and, by a misconception, dunghunters).

This is a family of only five or six species, native to high latitudes in both hemispheres and wandering widely in winter, some of the holarctic species passing far beyond the equator in their migrations. In the breeding season their habits change, and they proceed inland along the Arctic coast to nest upon the tundra. Their food then consists largely of insects, small mammals, and other animals, and upon these they feed their young.

Megalestris skua (Brünnich)

Skua

Plate 4

Catharacta skua Brünnich. Ornithologia Borealis. 1764. 33
Megalestris skua A. O. U. Check List. Ed. 2. 1895. No. 35

meg'ales'tris, Gr. μέγας, large and λῃστρίς, pirate craft; *sku'a* from the Faroese or Norwegian name of this bird

Description. *Blackish brown*, the feathers more or less tipped *with chestnut spots;* shafts of the wing and tail feathers white, excepting toward the tip; more or less streaked with white and chestnut around the neck;

under parts lighter; bill and feet blackish; iris brown; young similar but more streaked about the head and neck.

Length 20–22 inches; wing 16; tail 6; central feather elongated .5; bill 2.1; gape 3; tarsus 2.7; middle toe and claw 3.1; the young much less, the wing being of different shape and only 12.25 in length.

The Skua, or Sea-hawk may be recognized from the other jaegers by its greater size and robustness. It is a rare bird on this side of the Atlantic, although it may breed in the region of Baffin bay. It has been taken at least three times off the coast of Massachusetts. There are three records for this State, the first being recorded by William Dutcher, *Auk*, 3: 432. The bird was found dead on the beach by Mr M. F. King, of the Amagansett Life Saving Station, Suffolk county, N. Y., on March 17, 1886. It had undoubtedly been washed ashore and frozen in the ice during the gale of January 9th preceding. The second specimen was secured on Niagara river, in the spring of 1886, by the late Charles Linden of Buffalo, N. Y., and is reported in Bergtold's *List of the Birds of Buffalo and Vicinity*, also in the *Auk*, 6: 331. A third specimen struck the Montauk Point Light August 10, 1896. Its wing was sent to the Biological Survey in Washington where it was identified by Dr Fisher.

Stercorarius pomarinus (Temminck)

Pomarine Jaeger

Plate 4

Larus pomarinus Temminck. Manuel d'Ornithologie. 1815. 514
Lestris pomarinus DeKay. Zool. N. Y. 1844. pt 2, p. 316, fig. 292
Stercorarius pomarinus A. O. U. Check List. Ed. 2. 1895. No. 36

stercora'rius, Lat., pertaining to dung; *pomari'nus*, incorrectly formed for *pomatorhinus*, Gr. πῶμα, πώματος, a flap, and ῥίς, ῥινός, nose, alluding to the saddle or cere

Description. *Adult breeding plumage:* Upper parts brownish black or sooty slate; under parts white; neck all the way around white, except the pointed feathers which are yellow; crown, lores and sides of chin black; bill horn color, black at tip; feet black; upper part of tarsus light bluish; iris brown. *Dark phase:* Nearly uniform blackish brown, black on the crown and lightening to smoky brown on the belly; a slight gilding of the

feathers on the sides of the neck; bases of the wing feathers light. This melanotic plumage is usually confined to the immature birds, but may be found in adults, and all stages or gradations between the dark phase described above and the normal light plumage may be found. *Intermediate plumage:* Dark band of spots across the breast, sometimes broadening till the whole breast appears brown, mottled with white; sides barred with brown; under and upper tail coverts barred with white; central tail feathers project one inch; feet blotched with chrome yellow. Otherwise like the adult. *Young:* Considerably smaller than the adult; bill and feet much smaller and weaker; central tail feathers projecting only one half inch or less; body transversely waved with dull rufous, becoming broad bars on the flanks and the tail coverts; brownish black prevailing on the back and wing coverts; rufous predominating on neck and under parts; wings and tail brownish black; a dusky spot in front of the eye; feet yellow; toes black. The different phases of plumage grade into each other imperceptibly.

Length 20–23 inches; extent 48; wing 14; tail 8–9; bill 1.45–1.75; tarsus 2; tibia, bare .75; middle toe and claw 1.9–2; young less, in all dimensions, wing 12.5; bill 1.25; tarsus 1.69, the tail varying from 5.5 to 6.5 inches; the tail of the adult, exclusive of the elongated feathers, 5 inches.

This species may be distinguished from the other jaegers by its greater size, and by the shape of the central tail feathers, which are quite blunt and twisted on their axes so that the vanes at the tips are nearly vertical.

The Pomarine jaeger is a regular transient visitant along our Atlantic seaboard, occurring in June and July (Chapman), but more common in the fall from August 6th to October 30th. It is also a rare visitant to the Great Lakes. Their appearance in numbers on our coast is said to depend largely on the abundance of small bluefish. Migration records are as follows:

Rockaway, L. I. Sept. 19, 1875. (1). N. T. Lawrence, Forest and Stream, 10: 235
" Aug. 30–Oct. 15, 1872. Numerous. " "
Ossining, N. Y. Oct. 18, 1877. Dr A. K. Fisher
Long Island, N. Y. Aug. 11, 1888. L. S. Foster
Little Gull Island, L. I. Aug. 6–16, 1888. (common). Dutcher, Auk, 6: 125
Lake Ontario, Monroe co., N. Y. wv, rare. Truman R. Taylor
Buffalo, N. Y. (2). (Buffalo Soc. Nat. Sci. Collection and R. H. Reed collection). James H. Savage
Shinnecock bay, L. I. Oct. 9, 1885. (Carter). Dutcher, Long Island Notes
Amityville, L. I. 1885. " "
Montauk, L. I. Sept. 18, 1888. (Scott). " "
Little Gull Island, L. I. Sept. 18, 1888. (50). (Field). " "

Little Gull Island, L. I.	Sept. 20, 1888.	(15).	(Field).	Dutcher	Long Island Notes
"	Oct. 7, 1888.		"	"	"
Montauk, L. I.	Oct. 30, 1889.	(Scott).		"	"
Rockaway Inlet, L. I.	Aug. 2, 1891.	(7).	(Marshall).	"	"
"	Aug. 8, 1891.	(2).	"	"	"

Stercorarius parasiticus (Linnaeus)

Parasitic Jaeger

Plate 4

Larus parasiticus Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 136
Lestris richardsonii DeKay. Zool. N. Y. 1844. pt 2, p. 215, fig. 293
Stercorarius parasiticus. A. O. U. Check List. Ed. 2. 1895. No. 37

parasit'icus, Lat., parasitic

Description. Very similar in color to the Pomarine jaeger, perhaps a more slaty or brownish tinge on the upper parts in the adult. The different stages of plumage like that species; in size, however, decidedly smaller; the *central tail feathers straight and pointed, projecting from 3 to 4 inches.* The young are similar to those of the next species and must be distinguished by their relative dimensions, especially the structure of the bill; and the color of the shafts of the *primaries* which are *white with no abrupt change to brownish.* The color is also more buffy or rusty, and the size larger than in the young of longicaudus.

Length 17–20 inches; wing 12.8–13.75; tail 5–6, with central feathers projecting 3 or 4 inches farther; bill exposed 1.24–1.3; tarsus 1.60–1.75; tibia, bare .5; middle toe and claw 1.62–1.8. *Young* much less, the central tail feathers projecting .75 to 2.5 inches, according to age; wing 12.4–12.8; exposed culmen 1.22.

The Parasitic jaeger is a fairly common or at least a regular transient visitant on the coast of this State, appearing from the 15th of June to November 15th. Other names for it are Richardson jaeger, Arctic hawk gull, Black-toed gull, Boatswain, Marling-spike, Teaser.

Five specimens from the interior of the State were all young birds of the year, and at least two of them seemed to be in a very exhausted condition as they would not take wing when approached. The Monroe county bird was found on the shore of the lake, the Herkimer county bird on the water. Migration records are as follows:

Rockaway, L. I. June 1873. Lawrence, Forest and Stream, 10: 235
Gardiners Island. L. I. Aug. 1884. (Lucas & Buck). Dutcher
Shinnecock bay, L. I. Oct. 9, 1885. ♀ Dutcher

Joe's lake, Herkimer co., N. Y. Aug. 27, 1886. Juvenal. Ralph & Bagg, p. 104
Niagara river, N. Y. Sept. 1887. Juvenal. Harry Lansing
Little Gull Island, L. I. Aug. 6–16, 1888. (common). Dutcher, Auk, 6: 125
" Sept. 18, 1888. (50). (Field). "
" Sept. 20, 1888. (15). " "
" Aug. 24, 1889. (2). " "
Canoe lake, L. I. Aug. 25, 1890. "
South Oyster Bay, L. I. Sept. 10, 1891. ♂. "
Rockaway, L. I. July 29, 1893. (3). "
Montauk, L. I. Nov. 15, 1894. "
Buffalo, N. Y. Oct. 2, 1895. James Savage
Lake Ontario, Monroe co., N. Y. Nov. 10, 1897. George Guelph
Buffalo, N. Y. About Oct. 25, 1907. (Grieb). James Savage
Long Island, N. Y. "Apr. 30 (Rockaway); Aug. 6–Nov. 9 (Amityville)." Braislin, p. 35

Stercorarius longicaudus Vieillot

Long-tailed Jaeger

Plate 4

Stercorarius longicaudus Vieillot. Nouveau Dictionnaire. 1819. 30: 157
Lestris buffoni (?) DeKay. Zool. N. Y. 1844. pt 2, p. 314, fig. 291
Stercorarius longicaudus A. O. U. Check List. Ed. 2. 1895. No. 38

lon'gicau'dus, Lat., *longus*, long, and *cauda*, tail

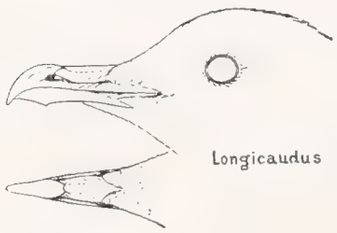
Description. Colors and color phases practically the same as in Parasitic and Pomarine jaegers, but the dark phase is apparently of rare occurrence. The tarsus leaden blue, tibiae and feet black. The *shafts of the first 2 or 3 primaries white, the others brownish*, an abrupt change from white to brown at the third primary.

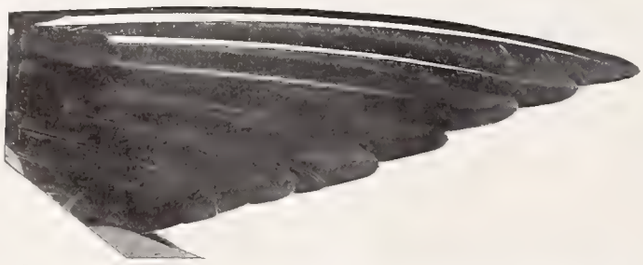
Length 17–23 inches; wing 11.75–12.5; tail 14–16, the central feathers projecting 8–10 inches in the adult; bill 1.1–1.3; tarsus 1.5–1.8; tibia bare .75; middle toe and claw 1.4–1.65. *Young* smaller, the central tail feathers projecting only a short distance, making the total length much less than recorded for the adult, wing 9.5–11.25.

Distinctive marks. Adult birds of this species are easily recognized by the excessive elongation of the central pair of tail feathers, the shorter and weaker bill and lighter bulk of body. The young are also smaller than those of the Parasitic jaeger and the mottling and marbling is of a prevailing leaden grayish; the tarsus is relatively longer than in parasiticus, being longer than the middle toe and its claw, while the reverse

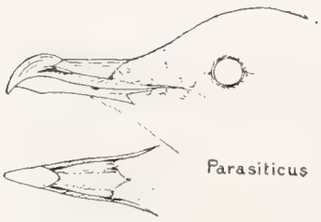
is the case in parasiticus; the unguis is longer than the cere or saddle; and there is an abrupt change at the third primary from white to brownish shafts as in the adult.

The Long-tailed, Arctic, or Buffon jaeger is apparently very rare in this State. Mr Dutcher has no record of specimens in his Long Island Notes. Mr Helme says it occurs as a rare visitant, but mentions no specimens. The same is true of the notes of the late L. S. Foster of New York and David Bruce of Brockport. Mr Chapman states that it is sometimes

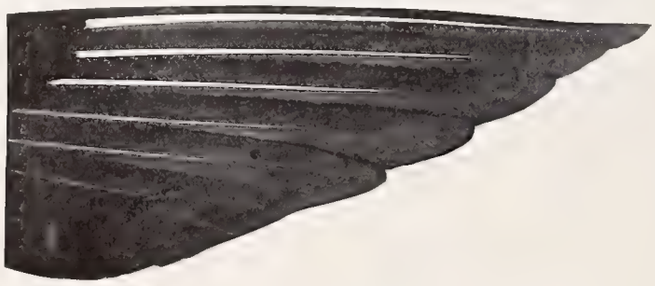




Long-tailed jaeger. (Note the abrupt change at the third primary in the color of the shafts.)



Bills of jaegers ½ nat. size



Parasitic jaeger. (Note the *gradual* change in the whiteness of the primary shafts.)

not uncommon off our coast. The only definite record for this State is an immature bird in the plumage of the first fall taken on Long Island and now in the Lawrence Collection [Am. Mus. Nat. Hist., no. 46094].

The jaegers of Giraud and DeKay are very difficult to make out. The Lestris parasiticus of Giraud, a description of which he copies from *Fauna Boreali Americana*, is evidently the Long-tailed jaeger which is now known as longicaudus, but the specimen from South Oyster Bay [Birds of L. I. p. 365], which he ascribes to this species is undoubtedly the light phase of a Parasitic and not a Long-tailed jaeger, since he states

that the tail feathers are about three inches shorter than the dimensions given by Swainson and Richardson. There seems no doubt also that the specimens from Gowanus bay [Birds of L. I. p. 365] may be the young of the Parasitic jaeger. The specimen to which he refers as Lestris richardsoni [p. 367] is a Parasitic jaeger in the dark phase; thus it appears that none of Giraud's specimens can be referred with certainty to the species longicaudus, although he himself refers two to that species. DeKay's Lestris richardsoni is undoubtedly a Parasitic jaeger. His L. buffoni is probably the same species, although it may be the intermediate phase of longicaudus.

Family LARIDAE

Gulls and Terns

Gulls and terns are distinguished by the structure of their bills, which are more or less epignathous and somewhat compressed, with a protuberant gonys, but lacking the horny saddle of the jaegers. The nostrils are linear or oblong, placed toward the middle or in the basal half of the bill, and are open transversely. Among the gulls, especially the larger species, the bill is stout, and hooked near the end, and the short symphysis of the branches of the lower mandible makes a prominent gonys, or angle of the jaw. There is a continuous graduation in the size and shape of the bill from the heavy hooked beak of the Great black-backed gull, to the slender, nearly straight bill of Bonaparte and Sabine gulls; and among the terns from the ponderous beak of the Caspian tern and the gull-like beak of *Gelochelidon* to the slim and delicate bill of the Black tern. The tail is nearly square in most gulls; in terns and some gulls it is forked. The legs are short, especially in terns, the *tibiae* being bare for a short distance. The legs are placed near the center of the body, so that they stand and walk with ease, carrying the body in a nearly horizontal position. The plumage is long and dense on the breast so that they rest lightly on the water, "swimming high" in comparison to divers or even ducks. Gulls and terns are very uniform in coloration, being mostly white with a darker mantle over the back and wing coverts, which ranges from slaty black in marinus to pale pearl-gray in hyperboreus, but is pure white in the Ivory gull. They have dusky or black markings, of greater or less extent, on the primaries, excepting in hyperboreus, leucopterus etc., where they are nearly pure white. A great point is made of these markings in the determination of species [*see* pl. 5, 6]. The molt occurs twice a year so that there is a slight difference between the summer and winter plumages. Immature birds

are darker colored and marked with brownish even in Pagophila alba requiring two or three years to reach mature plumage. The sexes are alike in color, but the males are slightly larger. In the breeding season the bill, mouth, eyelids and feet, one or more, are ornamented with brilliant shades of red or yellow; several species have a delicate salmon-pink suffusion of the breast plumage; the terns have a black cap, and a group of smaller gulls a black hood. Most gulls and terns are maritime birds, rarely traveling inland except on the larger streams and lakes. They are almost constantly on the wing searching for the fish, other marine animals and refuse, which constitute their food. The voice is harsh and shrill in the smaller species, but hoarse in the larger ones, inseparably associated with lapping waves or pounding surf, while their graceful forms following the ship are usually the first indication to the voyager that he is approaching land, though it be hundreds of miles away. Gulls and terns nest in colonies on rocks, or sandy beach, or the drift of inland lakes, or sometimes even in trees. The eggs are two to three in number, rarely four, of some olive, greenish, or buffy shade, spotted with brown or black. The young stay in the nest and are fed by their parents, i.e. they are nidicolous and altricial, but they are covered with down and some species which nest on the beach often move about when a few days old, thus showing an approach to the praecocial type.

Pagophila alba (Gunnerus)

Ivory Gull

Plate 6

Larus albus Gunnerus. Leem's Beskr. Finm. Lapp. 1767. p. 285
Gavia alba A. O. U. Check List. Ed. 2. 1895. No. 39

pagoph'ila, Gr. πάγος, ice, φιλος, loving; *al'ba*, Lat., white

Description. *Adult: Pure white*, shafts of the primaries yellow; bill yellowish; feet black; iris brown; eyelids red. *Young:* Upper parts, tips of the wings and tail feathers with dusky spots.

Length 15–19.5 inches; average 17; extent 41; wing 13.25; tail 5.5; culmen 1.4; gape 2.1; depth of bill at nostril .45; tarsus 1.45; middle toe and claw 1.75.

This is an arctic species, very rarely entering the United States. The only specimen from New York is recorded by Dutcher in the *Auk*, volume 12, page 290. It was shot on Great South bay, near Sayville, L. I., by John Goldswerth, January 5, 1893. Mr Helme writes that he once saw a single bird of this species flying about Mt Sinai Harbor, Suffolk county, N. Y.

Rissa tridactyla (Linnaeus)

Kittiwake

Plate 6

Larus tridactylus Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 136
DeKay. Zool. N. Y. 1844. pt 2, p. 313
Rissa tridactyla A. O. U. Check List. Ed. 2. 1895. No. 40

ris'sa, Icelandic name; *tridac'tyla*, Gr. τριδάκτυλος, three-toed

Description. Head, neck, tail and under parts white; back and wings pearl-gray or dark bluish; outer web of the first primary and tip of wing to length of three inches black, the *division being squarely across the end of the wing;* primaries after the first tipped with white; bill yellow; *feet black;* iris reddish brown; eyelids red; *hind toe a mere knob* without any nail. *In winter:* Small black crescent in front of the eye; back of head and neck, and the sides of the breast tinged with bluish gray, changing to blackish in the ear region. *Young:* Crescent in front of eye, ear spot, back of neck, part of the wing coverts, *band at tip of tail*, except outer feathers *black;* more black on the primaries than in the adult; bill dusky.

Length 16–17.7 inches; wing 12.25; tail 4.5; bill 1.3–1.5; tarsus 1.3; middle toe and claw 1.8.

In winter and immature plumage the Kittiwake bears superficial resemblance to the Bonaparte gull, but by referring to the description given above, and plate 6, the distinction is easily manifest. Furthermore the absence of the hind toe in the present species is an easy mark of identification when the bird is in hand.

Giraud, DeKay and Lawrence mentioned the Kittiwake as occurring on the shores of Long Island. J. H. Batty in *Forest and Stream*, volume 7, page 164, treats of it as a winter visitant on our coast. Mr Dutcher calls it a common migrant in late fall, and an uncommon winter resident, occurring some distance off shore, his dates ranging from November 13 to March 17. It is apparently rare on the inland waters of the State. William Hopkins has reported a specimen taken at Auburn, N. Y., January 4, 1854 [*see* Bost. Soc. Nat. Hist. Proc. 1856, 5: 13]. One from Seneca lake is recorded in the Auburn list; one from Oak Orchard, Orleans county, April 10, 1881, by David Bruce; one from Constantia, Oswego county, November 9, 1890,

by Bagg, *Auk*, volume 11, page 162. Mr Truman R. Taylor has noticed it as an irregular migrant in Monroe county.

The Kittiwake is holarctic in range, breeding from the Gulf of St Lawrence to 80° north latitude. Its name is derived from the call notes which resemble the syllables *kitti-aa, kitti-aa.* It is more pelagic in haunts than any of our other species.

Larus hyperboreus Gunnerus

(Larus glaucus on plate)

Glaucous Gull

Plate 5

Larus hyperboreus Gunnerus in Leem, Beskr. Finm. Lapper. 1767. p. 22 (note)
Larus glaucus A. O. U. Check List. Ed. 2. 1895. No. 42

larus, Gr. λάρος Lat. *lar'us*, gull; *hyperbo'reus*, Lat. northern

Description. *Adult in summer: White, the mantle very pale pearl-blue;* primaries all white, or extremely pale pearl-gray, fading to white at the tips; bill chrome yellow with a vermilion spot at the angle; feet pale flesh color, or yellowish; iris yellow; eyelid vermilion; mouth flesh-color. *In winter:* Head and neck slightly varied with brownish. *Second winter: Pure white*, sometimes with trace of the brown bars and mottlings characteristic of the first winter, sometimes with a trace of the adult plumage; bill flesh-colored with dusky tip. *First winter: Dingy white, profusely marked with pale buffy brown* or drab gray, the markings being coarse bars and mottlings on the back and wing coverts, obscure streaks on the head and neck, obscure bars and fine mottlings on the wings and tail; under parts nearly uniform pale brownish or drab gray; legs and bill flesh color, the latter tipped with black; iris brown; the primaries "ecru drab" varying to dull white. The plumage gradually fades during the winter, becoming very light toward spring.

Length 26–32 inches; extent 60; wing 16.7–18.75; tail 7.4–8.5; bill 2.3–3; gape 3.75; depth of bill at angle .8–1; tarsus 2.4–3.25; middle toe and claw 2.65–3. Immature birds have the smaller dimensions.

The white phase of this gull is Larus hutchinsii of earlier writers and probably the L. arcticus also. According to Dr Dwight [Auk 23: 30–34] birds of the third winter sometimes show the plumage which is most characteristic of the second year, and sometimes birds of the second winter possess the mantle and white body feathers of the adult.

The Glaucous gull, Burgomaster, or Ice gull is an uncommon but regular winter visitant to the shores of this State. It is an Arctic species famous for its raucous voice and gluttonous appetite. Several have been captured on the lower Hudson river and on Long Island, [*see* Chapman, Birds of New York and Vicinity, p. 16]. Recent records are as follows:

Washington co., N. Y. Winter 1868. (White phase). Elliot, Birds of N. A., pl. 12
Long Island sound, N. Y. Mar. 1879. L. I. Hist. Soc. Col.
Long Island, N. Y. Mar. 4, 1880. (White phase). Found in Fulton Market, Mearns, N. O. C. Bul., 5: 189
Bangor, Franklin co., N. Y. About 1880. Merriam, N. O. C. Bul., 7: 257
South Oyster Bay, L. I. Mar. 11, 1884. Dutcher, Auk, 2: 37
Springs, L. I. Gardiners Bay. Mar. 19, 1887. (25 seen). (Parsons). Dutcher, Notes
New York, N. Y. Jan. 19, 1889. wv, oc. L. S. Foster
Sag Harbor, L. I. Dec. 11, 1890, ♀; Feb. 8, 1890. Dutcher Collection
Far Rockaway, L. I. Jan. 11, 1891. ♀. Immature. Howell, O. and O., 16: 61. Lin. Soc. N. Y. Proc. 1891. p. 5; Braislin, p. 36
Far Rockaway, L. I. "Jan. 1, 1891." (Howell). Dutcher, Notes
Miller's Place, L. I. wv, 1893. (Helme). Dutcher, Notes
Buffalo, N. Y. Jan. 29, 1895; Feb. 13, 1898. Savage, Auk, 12: 312
Lake Ontario, Monroe co., N. Y. Feb. 22, 1899. Truman R. Taylor
Rockaway, L. I. Jan. 2, 1901; Jan. 13, 1901; Mar. 13, 1904; May 1, 1904. (Peavey) Braislin. Lin. Soc. N. Y. Proc. 1907. p. 36
"Larus hutchensii" New York and vicinity. Lawrence list

Larus leucopterus Faber

Iceland Gull

Larus leucopterus Faber. Prodr. Isl. Orn. 1822. p. 91
A. O. U. Check List. Ed. 2. 1895. No. 43

leucop'terus, Gr. λευκός, white, and πτερόν, wing

Description. *Colors and sequence of plumages as in the Glaucous gull,* but in immature birds the shafts of the primaries are more often white or brownish instead of yellowish as in hyperboreus. Also the mottling of the first winter plumage, according to Dr Dwight, is sometimes more blackish in the present species.

Length 24–26 inches; wing 14.75–16.5; tail 6–6.7; bill 1.6–1.9; depth of bill .62–.7; tarsus 2.1–2.5; middle toe and claw 2.1–2.35.

The Iceland or White-winged gull, like its larger counterpart the Glaucous gull, is an holarctic species, and straggles southward in winter to

the Great Lakes and the shores of Long Island. The specimens taken in this State are almost always immature birds and are most often seen in winter or early spring. Audubon mentions this species as occurring as far south as the Bay of New York, but neither Giraud, DeKay, nor Lawrence mentions it as a New York species. Dr Merriam, in April 1878, saw two of these gulls over a pond in the Adirondack region, as recorded in Bulletin of Nuttall Ornithological Club, volume 6, page 235, and in *Auk*, volume 1, pages 241–42. Other records are as follows:

Peterboro, Madison co., N. Y. Feb. 1, 1884. Juvenal. Lawrence, Auk, 1: 240. Green-Smith Col.
Miller's Place, L. I. Winter of 1893; Nov. 30, 1888. A. H. Helme
Lansingburg, N. Y. Nov. 21, 1888. ♀ Juvenal. State Museum. No. 41
Rye, N. Y. Mar. 3, 1894. Porter, Auk, 12: 76
Cayuga lake, N. Y. Mar. 17, 1897. (In white plumage). L. A. Fuertes
Oswego, N. Y. wv, oc. D. D. Stone
" Dec. 28, 1899. Fairly common. Gerrit S. Miller
Rockaway Beach, L. I. Feb. 6, 1898. (Peavey). Braislin, p. 36
Lake Ontario, near Brockport, N. Y. Sept. 10, 1899. ♂ Juvenal. David Bruce

The last specimen taken in the State, as far as I can ascertain, is an immature female collected by the author at Rochester, N. Y., April 14, 1904. It was associated with a large flock of Ring-billed gulls and a few immature Herring gulls on the wide waters of the canal and as soon as seen was recognized by the peculiar chalky whiteness of its plumage, and especially the whiteness of its wings when flying; for, although it was in the faded plumage of the first winter, it appeared wholly white when seen at a distance. Although its companions were very noisy, no sound was heard from the Iceland gull during the three days while it was under observation.

Larus kumlieni Brewster

Kumlien Gull

Larus kumlieni Brewster. N. O. C. Bul. 1883. 8: 216
A. O. U. Check List. Ed. 2. 1895. No. 45

kumlieni, in honor of Ludwig Kumlien

Description. Colors practically the same as hyperboreus and leucopterus, excepting the *primaries*, which have *subterminal bars*

and shadings of slaty or brownish. Immature birds are darker colored than the Iceland gull, the flight feathers being brownish gray, darker on the outer webs; tail almost solidly drab gray, the base and outer feathers sprinkled with dingy white; the barring and mottling is coarser and darker than in leucopterus [*see* Dwight, *Auk*, 23:36–41].

This species, first described by Mr Brewster in 1883, is little known as yet, but is apparently a rare winter visitant on the waters of this State. The first specimen from New York was shot at Green Island, on the Mohawk river, January 27, 1884, by Edward Root, and is now in the State Museum, Park Collection. Mr Park's notes made from the fresh specimen may be of interest: "Length 23 inches; extent 51.75; wing 15.75; tail 7; tarsus 2.2; middle toe and claw 2.25; bill 1.6; bill of a general light watery yellow, palest and with a greenish shade at base, with a small vermilion spot on lower mandible about at angle in a cloud of dusky. Upper mandible on top chrome yellow at angle with a line of red along ridge toward the point; iris mottled grayish brown; tarsus and toes flesh color, claws nearly black. Weight 21 ounces. Poor in flesh, stomach contained a few grains of gravel. Ovaries show that it had been through *at least one* breeding season." This bird was identified by Mr Brewster. Its head and neck are streaked and suffused with grayish and the breast is slightly soiled with grayish. Thus it is evidently a nearly mature specimen, being a bird of the second or third winter. A second record for New York is given by Braislin, *Auk*, 16: 190; it is an immature male which was shot by John Tiernan, 5 miles off Rockaway Beach, L. I., on March 8, 1898. An immature female from Stamford, Conn., February 16, 1894, is reported by Porter [Auk, 12: 76; *also* Dwight, Auk, 23: 37].

Larus marinus Linnaeus

Great Black-backed Gull

Plate 5

Larus marinus Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 136
DeKay. Zool. N. Y. 1844. pt 2, p. 308, fig. 283
A. O. U. Check List. Ed. 2. 1895. No. 47

mari'nus, Lat., marine

Description. *Large: Mantle slaty black* with purplish reflections; primaries slaty, or blackish tipped with white; secondaries broadly tipped

with white; head, neck, tail and under parts pure white; bill bright chrome yellow, with a large vermilion spot; iris lemon-yellow; eyelids and mouth vermilion; legs and feet pale flesh color. *Immature:* "Upper parts dusky chocolate-brown, mottled with whitish and light rufous, the latter on back and wings, the feathers being tipped and wing coverts deeply indented with this color; primaries and tail brownish black, the former tipped, the latter subterminally barred, and its outer feathers mottled, with whitish." [Coues]. Under parts varied with whitish and dusky, lightest on the throat; bill black. The specimen figured by Mr Fuertes, plate 5, is evidently in the faded-out plumage of the first winter, being much lighter than the average fall specimen of the first year.

Distinctive marks. Mature birds of this species can always be recognized even at a great distance by their large size and black mantle. Immature birds differ from the Glaucous gull, our only species which compares with them in size, by their dark primaries and the generally darker coloration of the upper parts.

The Great black-backed gull, Saddle-back, or Coffin-carrier is less arctic in distribution than the three species just described, breeding as far south as the Bay of Fundy. It is consequently more often seen with us, occurring as a common winter visitant on the shores of Long Island, Mr Dutcher's dates ranging from September 22 to March 17, and a regular but uncommon winter visitant on the Great Lakes [*see* Savage, Auk, 12:312, and Davison, Birds of Niagara County]. It is also occasionally taken in the interior of the State, as at Brockport [*see* Short, p. 5]; and Branchport, April 18, 1898 [*see* Stone, Auk, 16:284]; and at Booneville, February 1903 [*see* Johnson, Auk, 20:303]. Correspondents also report it from the shore of Lake Ontario in the counties of Orleans, Monroe and Oswego; also from Cayuga and Seneca lakes.

The Black-back is chiefly a maritime species. It is very noisy in its breeding haunts, which are confined to the shores of the north Atlantic. All observers agree that it is one of the wariest birds at all times of year.

Larus argentatus Pontoppidan

Herring Gull

Plate 5

Larus argentatus Pontoppidan. Danske Atlas. 1763. 1:622
DeKay. Zool. N. Y. 1844. pt 2, p. 306, fig. 270, 284, 286
Larus argentatus smithsonianus A. O. U. Check List. Ed. 2. 1895. No. 51a.

argentā'tus, Lat., silvery

Description. *Adult in summer:* Head, neck, tail, and under parts pure white; mantle "gull-blue" about the same shade of pearlblue as in delawarensis, but darker than in hyperboreus, leucopterus and kumlieni, primaries like the back at base extending successively farther along the center of the feathers and growing nearly white, then comes a black portion varying from a length of 5 inches on the first primary to a mere spot on the seventh; all the primaries also have rounded white tips, and the first a subapical rounded white spot about 1 inch in diameter, which becomes elongated in older birds and sometimes coalesces with the white tip, making a terminal white portion 2 inches in length; the second primary has a subterminal white spot, such as younger birds possess on the first primary; bill bright chrome with a vermilion spot at the angle; legs and feet pale flesh color. *In winter:* Head and neck streaked with dusky; bill duller. *Nearly mature:* Upper parts margined or mottled with grayish; tail with an indefinite subterminal dusky band. *First winter:* More or less edged and mottled with dusky; wing and tail feathers brownish black; often on upper parts patches of pearl-blue; bill flesh color tipped with black. *Juvenal plumage:* "Above grayish brown with whitish and buffy edgings; below plumbeous with inconspicuous whitish mottling, the head and neck paler and tending to streaking. The primaries are uniformly brownish black. The rectrices are similar but basally, and the outer one slightly, mottled with grayish white. The bill is plumbeous and the feet flesh-colored. *Natal down:* Grayish above with obscure mottling on the back and black spots on the head and throat, paler below." [Dwight, Auk, 18:58]

Length 22.5–26 inches; average 24; extent 54–58; wing 16.5–18; tail 7.5; bill 1.95–2.5; depth of bill at angle .7–.85; tarsus 2.3–2.8; middle toe and claw 2.3.

Field marks. The amateur can scarcely mistake this bird for any of our other gulls, except the Ring-billed species. The young Iceland and Kumlien gulls are practically of the same size, but the plumage of the present species is much darker, especially on the wings and tail, than in

either of those birds, although a faded out Herring gull of the first winter might be mistaken for the juvenal plumage of the Kumlien gull. Students should be very wary of trying to recognize at a distance any of our rarer gulls in their immature plumage. This can be done with certainty only when the bird is in the hand, or in very exceptional circumstances. The Ring-billed gull is considerably smaller than the Herring gull, but at a distance it is difficult to distinguish from the present species. The surest way to recognize the species is to get near enough to judge its size accurately, and, if the bird is immature, the broad, subterminal black band on the tail of the Ring-billed gull is distinctive, and in mature birds the black ring on the bill.

Distribution. This is the commonest and most generally distributed gull in the State, in fact this is true of the holarctic realm in general, the American and the palearctic bird now being considered identical. It is abundant along the coast of New York in winter and a few are often seen in summer. It is almost as common on the Great Lakes and rivers as on the seacoast, but occurs more as a transient visitant in the interior, especially on small bodies of water. It still breeds in the Adirondack region, more particularly in the western and southwestern portions, in the counties of Franklin, Herkimer and Hamilton. Mr L. L. Merriam reports it as common and breeding in 1907, on Raven lake and North pond. I failed to find it breeding in Essex county during the summer of 1905, but it probably was breeding in the southern part of the county, as birds made daily trips to Elk lake where they had nested in preceding years, but their nests have been broken up, or their young killed by thoughtless tourists until they have deserted the islands in that lake which they formerly occupied. I regret to say that this is also the case in many parts of the Adirondacks, notwithstanding the law which has been passed for the protection of these birds. It is said that they formerly bred on the islands near the north and northeast shore of Lake Ontario, but no evidence has been found that they do so at present. In 1902 a small sailing boat landed on one of the barren islands and found only dead birds around the nests.

Migration. The Herring gulls which remain all winter on the lakes and open rivers of the State are joined in March or early April, when the ice goes out, by large numbers which have spent the winter farther south. They continue common on the lakes till late in May. During June and July few, if any, are seen in the interior of the State except a small number which are summer residents of the Adirondacks. In early August this gull begins to appear again on our inland waters and continues to increase in numbers until the first of November when the majority gradually depart for the south. On the lower Hudson, Dr Fisher gives its average time of arrival as September 21st, and its departure for the north, May 9th. On Long Island, it comes from the north in September and departs in May.

Haunts and habits. The Herring, or Winter gull, is the species usually seen coursing along the shore, or lying in long "beds" on the sand bars or on the water some distance offshore, both on the inland lakes and the seacoast. They are continually circling about the harbors or following garbage scows in flocks of thousands. They also follow coastwise vessels to feed on refuse cast overboard by the cooks, and when the coveted morsels are thrown in the sea, the few birds which are near the ship are joined in an incredibly short time by dozens and sometimes hundreds of birds, when the air above the floating crackers and bacon scraps becomes a confused tangle of screaming gulls, until the last vestige is devoured. It is quite impossible to deceive these birds by throwing bits of wood or cigar stubs from the boat; although I have seen it tried many times, no birds appeared to take the slightest notice, but as soon as a piece of cracker was thrown, there was immediately an eager scrimmage. I have often sat on deck and watched the soaring gulls above the masthead with scarcely any motion of their wings, moving against a 10 mile breeze and maintaining the same position with reference to the ship as she plowed along at the rate of 12 miles an hour. The Herring gull becomes quite tame and friendly in cities and parks where it is protected, but on the lake shore and sound where gunners often molest it, it becomes very wary, and I have had great difficulty in securing specimens in different plumages. On its breeding grounds, the scream of this bird,

according to Audubon and Nuttall, is a barking *akak kakak*. Every one must be familiar with the Sea-gull's scream, but it is difficult to describe in syllables. Its food, like that of gulls in general, consists of small fry, dead fish, and any floating refuse which it can pick up. It is sometimes found feeding on carrion at a considerable distance from water. When securing live fish, it plunges its head and neck under water, either when dropping from the air, or resting on the shore, but it never seems to dive like a Kingfisher or Fish-hawk. I have seen it standing on a sandy beach, in shallow water, devouring the small fishes which were swimming about it, till it had swallowed upward of 50, as was proved by killing and dissecting the bird. It is probable that the fish destroyed by this bird are mostly small fry which have no value except as food for other fish, and I am inclined to believe that its principal food consists of dead, or disabled fish, or of refuse which would pollute the water and shore. Hence, it can be regarded as a beneficial species, especially when we consider its esthetic importance. The lake or seashore without its graceful gulls and terns would lose much of its charm.

Nest and eggs. The Herring gull places its nest on the ground or a shelf of rock, and occasionally in a scrubby bush or tree. It prefers to nest on islands, probably to escape the attacks of marauding animals. The nest is composed of grasses, moss, and seaweed; and contains two or three eggs, varying in color from greenish or bluish white to brownish olive, with irregular spots, blotches and lines of brown and blackish. In the Adirondacks the eggs are laid from the 1st to the 30th of May.

Larus delawarensis Ord

Ring-billed Gull

Plate 5

Larus delawarensis Ord. Guthrie's Geography, Am. Ed. 2. 1815. p. 319
Larus zonorhynchus DeKay. Zool. N. Y. 1844. pt 2, p. 308, fig. 282, 285
Larus delawarensis A. O. U. Check List. Ed. 2. 1895. No. 54

delawarĕn'sis, of Delaware

Description. *Adult in summer:* Head, neck, tail and under parts pure white; mantle light pearl-blue; primaries tipped with white, except

the first, the first with a white spot near the end, the second with a small white spot on the inner web, the first black for nearly its whole length, the second to the sixth black for a shorter distance, becoming less and less, until the sixth, where it is only a narrow bar; bill greenish yellow with a band of black around it at the angle; iris pale yellow; eyelids orange-red; feet greenish yellow. *In winter:* Back of head and neck spotted with dusky. *First winter plumage:* Irregularly mottled with dusky brown and white, the back showing patches of pearl-blue; primaries black; tail mostly white with a broad band of black near the end; bill tipped with black, sometimes with a yellowish spot at the end. *Juvenal plumage:* Heavily mottled with brownish black, the feathers of the upper parts margined with buffy white; basal third of bill flesh-color, the rest black.

Length 18–20 inches; extent 49; wing 13.5–14.75; tail 6; bill 1.55–1.75; gape 2.3; depth of bill at angle .5–.65; tarsus 1.9–2.45; middle toe 1.8. The smaller dimensions refer to the females and young.

Distinctive marks. This bird can scarcely be mistaken for any other of our gulls, except the Herring gull, but I am inclined to think this often occurs, as comparatively few reports of this species have been received from amateur observers throughout the State. This bird is 5 inches shorter than the Herring gull. The old birds also may be distinguished by the black ring on the bill, the greenish yellow legs, and the black tip of the first primary; and young birds by the size, and the broad band on the tail.

Distribution. This is a species of the boreal and arctic zones, breeding mostly in the interior of British America. According to Giraud and Dutcher it is a common winter visitant on the shores of Long Island. Dr Braislin calls it a regular transient visitant, rare in winter and summer. It is given as an occasional winter visitant in the Hudson Highlands, by Mearns; at Ossining, by Fisher; and in western New York, by Short. The Auburn List gives it as a rare visitant. It has been recorded from Cayuga, Erie, Essex, Monroe, Niagara, Oneida, Ontario, Orleans, Oswego, Onondaga, Seneca, Schuyler, Tioga, Westchester and Yates counties, but in nearly every instance was called a rare transient visitant. On Canandaigua and Seneca lakes I have found it decidedly less common than the Herring and Bonaparte gulls, but on Lake Ontario and the Erie canal it is sometimes fairly abundant as a spring migrant. The record of its nesting at Axton in

the northern Adirondacks found in the *Auk*, volume 19, page 299, should probably be referred to the Herring gull.

Migration. On Long Island Dr Braislin's dates in the fall are September 5 to November 12, in spring from March 27 to May 15; Mr Dutcher's dates range from August 27 to April 10. At Rochester it arrives from the south in considerable numbers from the 25th of March to the 5th of April, and is commonest about the middle of April, departing for the north about the 10th of May. In the fall it seems to be less common, occurring during October and early November.

With us the habits and food of this species do not differ materially from those of the Herring gull, but in the interior of America it is said to live principally on grasshoppers and other insects which it captures both in the air and on the ground. In the vicinity of Rochester, N. Y., it frequents the "wide waters" of the Erie canal before the water is admitted in the spring, to feed on the refuse and dead fish, and sometimes gathers in great numbers on the fields where garbage is scattered, late in March and early in April.

Larus atricilla Linnaeus

Laughing Gull

Plate o

Larus atricilla Linnaeus. Syst. Nat. Ed. 10. 1758. 136
DeKay. Zool. N. Y. 1844. pt 2. p. 310. fig. 289, 290, 296
A. O. U. Check List. Ed. 2. 1895. No. 58

atricil'la, Lat. black-tail; only applicable to the young (Coues)

Description. *Adult in summer:* Head and throat slaty black; mantle dark slate color; first six primaries black, usually with white tips, their bases like the mantle for an increasing distance from the first to the innermost; neck, rump, tail, tips of the secondaries, and under parts white, the breast and belly with a rosy tinge; bill deep carmine red with dusky tip; feet dusky red; iris blackish; eyelids carmine; mouth deep red. *In winter:* Head white mixed with blackish; bill and feet more dusky; under parts pure white. *Immature;* The mantle mixed with patches of grayish brown; primaries brownish black, lighter toward the tips; outer webs of secondaries brownish black; tail plumbeous gray with a broad band of black at the tip; upper tail coverts and under parts white, sometimes washed

with dusky white. *Juvenal plumage:* Upper parts light brownish gray, the feathers tipped with grayish white; a dusky space about the eye; forehead and under parts dull white, clouded with gray, especially on the breast; primaries black; tail dark bluish gray, with broad black subterminal band; bill and feet mostly brownish black.

Length 15–17 inches; extent 41; wing 12.5–13; tail 5; bill 1.65–1.75; gape 2.3; depth of bill at nostril .45; tarsus 2; middle toe and claw 1.5.

Distinctive marks. The dark mantle and primaries of the Laughing gull will distinguish it from our other Black-headed gulls in the mature plumage. Young birds may be recognized by the wholly brownish black primaries, and the generally darker upper parts than in our other small gulls.

Distribution. The Laughing, or Black-headed gull is an inhabitant of the tropical and austral regions of America. In this State it is practically confined to the seacoast, where it was a common summer resident in Giraud's day but now is rare, nesting only on the salt marshes of Great South bay. It is reported as an accidental summer visitant in the Hudson Highlands by Mearns; and near Buffalo by Bergtold. The northernmost colonies known are on the coast of Maine and Massachusetts. It occurs with us now chiefly as an uncommon transient visitant on Long Island first appearing in April, and passing south in September. Evidently the number of breeding colonies on the Atlantic coast has rapidly decreased during the last 30 years, but the protection by the Audubon Societies will probably save them from extermination. In Mr Dutcher's Long Island Notes the last records of its breeding are: South Oyster Bay, May 24, 1884; Amityville, June 11, 1887, 10 pairs; Cedar Island, May 19, 1888.

Haunts and habits. This gull inhabits the bays, islands and marshes of the seacoast, making its nest on the ground among the grasses. The eggs are from two to five in number, usually three, varying in color from a dull grayish white to a dark greenish or olive-brown, thickly spotted and splashed with brown, black, reddish and dull lilac, 2.12 by 1.55 inches in size. Dr Coues writes, "its cachinnations in the breeding season are not more vociferous than those of other species under similar circumstances." Langille

describes its call as "a long-drawn, clear note on a high key, sounding not unlike the more excited call note of the domestic goose; and every now and then it would give its prolonged weird laughter, which has given rise to its common name. To one who has heard it, it might be imitated by the syllables *hah-ha-ha-ha-ha*, *hah-hah-hah-hah-hah*, all of which are uttered on a high, clear tone, the last three or four syllables, and especially the last one, being drawn out with peculiar and prolonged effect."

Larus philadelphia (Ord)

Bonaparte Gull

Plate 6

Sterna philadelphia Ord. Guthrie's Geography, Am. Ed. 2. 1815. 2: 319
Larus bonapartii DeKay. Zool. N. Y. 1844. pt 2, p. 311, fig. 287, 288
Larus philadelphia A. O. U. Check List. Ed. 2. 1895. No. 60

philadel'phia, the city of Philadelphia, Pa.

Description. Head and throat blackish slate-color; neck, under parts and tail pure white; breast and belly with rosy tinge; white patch on the under and upper eyelid; back and wings light pearl-gray; primaries mostly white with black tips, the outer webs of the first and second margined with black; bill black; feet orange-red; iris dark brown; eyelids and mouth carmine. *In winter:* Head and throat white, washed on the back of the head with grayish; no rosy tinge below; feet flesh-color; dusky spot in front of eye and below the ear. *First winter plumage:* Similar to the adult in winter, but the ear spot more distinct; scapulars, wing coverts and secondaries varied with dusky brown; tail with a subterminal blackish bar; bill dusky flesh-color tipped with black; feet pale flesh-color.

Length 12–15 inches; extent 32–34; wing 10–10.5; tail 4; bill 1.2; gape 1.75; depth of bill at nostril .25; tarsus 1.4; middle toe and claw 1.4.

Distinctive marks. In plate 6 the distinctive wing pattern and head colors of this species, both in the mature and immature specimens, are clearly shown. An immature Kittiwake is sometimes mistaken for this species, but the former may be recognized by its dark feet with no hind toe, the dusky band across the back of its head and its different wing pattern. The young Laughing gull is much darker on the wing tips and upper parts, is larger, and has a much larger bill and legs.

Distribution. Next to the Herring gull this is the best known and most generally distributed gull in the State, especially in the interior. It occurs as a transient visitant in considerable numbers on our inland lakes, as well as the seacoast, and a few are occasionally seen in winter on Long Island and the Great Lakes. It is purely an American species and breeds in high latitudes.

Migration. On Long Island it arrives from the north in October or early November and returns to the north in April, Mr Dutcher's latest date being May 4, and Dr Braislin's, May 11. On Lake Ontario and other inland waters it usually arrives from the south from the 2d to the 15th of April, leaves for the north from the 20th of May to the 10th of June, returns from the north October 1st to 20th and departs for the south from the 1st to the 20th of November.

Habits. This little gull is more often found in flocks than our other species and is frequently seen flying over swamps and plowed fields, searching for worms and insects; but is usually met with on the lakes and rivers hunting its food like the Herring gull. It is far less wary than that species.

Larus minutus Pallas

Little Gull

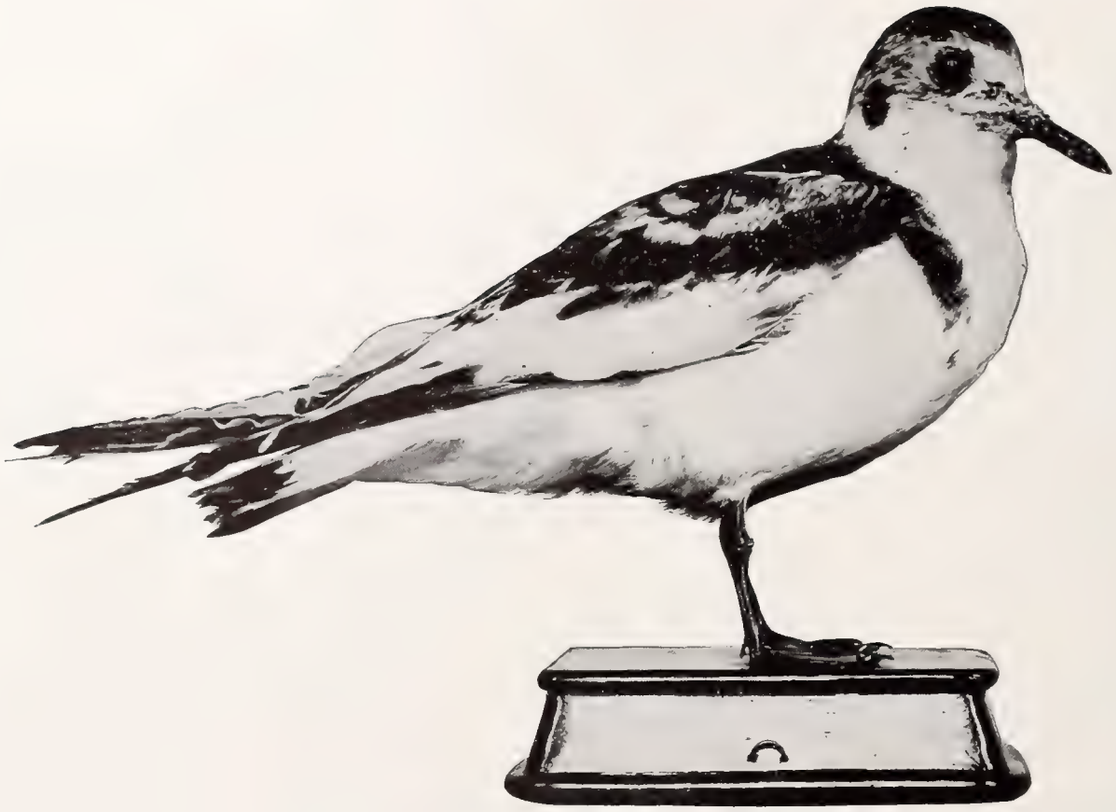
Larus minutus Pallas. Reisen Russ. Reichs. 1771. Apx. 35. 3: 702
A. O. U. Check List. Ed. 2. 1895. No. [60.1]

minū'tus, Lat., very small

Distinctive marks. The *very small* size of this gull, the smallest of its race, will distinguish it. The mature bird has a black head, pale mantle, lake-red bill, vermilion feet, and no black on the primaries. The young are extensively dark brown above; the primaries brownish black in the center, edged and tipped with white; tail has a broad black band.

Length 10.4–11.5 inches; wing 8.7–9; tail 4; bill .9–1; tarsus 1; middle toe and claw 1.

This old world species is very rare in North America. Besides the doubtful record by Swainson and Richardson, and one from the Bermudas, there are only two specimens from this country, both taken on Long Island; the first an immature specimen shot at Fire Island, Suffolk co., N. Y.,



Little gull. Larus minutus Pallas. Long Island specimen in American Museum of Natural History. ½ nat. size

about September 15, 1887. It was taken by Robert Powell and presented by John Wallace to the American Museum [*see* Dutcher, Auk, 5:172]. The second specimen is a young female collected on Rockaway Beach, May 10th, 1902, by Robert L. Peavey, and presented to the Brooklyn Institute of Arts and Sciences [*see* Braislin, Auk, 20:52].

Xema sabini (Sabine)

Sabine Gull

Plate 6

Larus sabinii J. Sabine. Lin. Soc. Trans. 1818. 12: 520, pl. 29
DeKay. Zool. N. Y. 1844. pt 2, p. 312, fig. 281
Xema sabinii A. O. U. Check List. Ed. 2. 1895. No. 62

xe'ma, meaning unknown; *sā'bini*, in honor of E. Sabine

Distinctive marks. This gull in any plumage may be recognized by its *forked tail.* The *peculiar wing pattern* and the *black border around the*

bottom of the hood are well shown by the figure on plate 6. Immature birds have no hood or collar; upper parts slaty gray waved and tipped with brownish white; under parts white; tail white with a black bar one inch wide in the middle, narrowing toward the edges. Adult birds in summer have a black bill, yellowish toward the tip, black feet, dark brown iris, vermilion mouth and eyelids.

Length 13–14 inches; wing 10–11.25; tail 4.5–5; forked .7–1.25; bill 1; depth of bill at angle .3; tarsus 1.25; middle toe and claw 1.25.

This beautiful arctic species is a rare visitant in this State. It is barely mentioned by DeKay and Lawrence, evidently on the authority of a specimen killed at Raynor South, L. I., in July 1837, and reported in Giraud's *Birds of Long Island*, page 363, and Baird, Brewer and Ridgway, *Water Birds*, volume 2, page 272. A second specimen from the State was reported by Worthington in *Auk*, volume 17, page 63. It was an immature female and was killed in Gardiners bay, on October 6th, 1899. Its stomach contained a cutworm and the remains of other insects. The only specimen known from the interior of the State is an adult bird in summer plumage, taken on the Montezuma marshes, in Seneca county about the year 1887, by Foster Parker of Cayuga, and now in the author's collection.

Gelochelidon nilotica (Hasselquist)

Gull-billed Tern

Plate 7

Sterna nilotica Hasselquist. Reise nach Pal. Deutsche Ausg. 1762. p. 325
Sterna anglica DeKay. Zool. N. Y. 1844. pt 2, p. 301, fig. 279
Gelochelidon nilotica A. O. U. Check List. Ed. 2. 1895. No. 63

gelochelī'don, Gr. γέλως, laughter; χελιδών, a swallow; *nilo'tica*, of the Nile

Description. *Adult in summer:* Crown and occipital crest greenish black; neck, tail and under parts white; mantle, rump, and middle tail feathers pale pearl-gray; primaries dusky grayish, the first silvered on the outer web, the shafts of all yellowish, and their inner webs with white spaces, largest on the first, diminishing to the last; *bill and feet black;* the *bill heavy and somewhat curved over at the tip. In winter:* Similar, but the head white with a grayish spot before the eye and over the ear.

Length 13–15 inches; extent 33–37; wing 11.75–12.25; tail 5.5, forked 1.2–1.75; bill 1.4; depth of bill at base .45; gape 2; tarsus 1.3; middle toe and claw 1.1.

This southern species, also known as the Marsh, Anglican, or Nuttall tern is an accidental summer visitant on the coast of this State. Giraud and DeKay found it rare on the coast, but the latter says that it occurs more frequently on the Great Lakes, a statement which I have been unable to verify and it is certainly not true at the present time. A record of its capture on Shinnecock bay, L. I., on July 8th, 1884, is given by Dutcher, *Auk*, volume 2, page 38; and on South Oyster bay, a pair on July 4, 1882, *Auk*, volume 1, page 34; also Point Lookout, Queens county, July 1, 1885, (5), Dutcher's Long Island Notes. This cosmopolitan species breeds on the Gulf and the South Atlantic coasts, as far north as southern New Jersey.

Sterna caspia Pallas

Caspian Tern

Plate 8

Sterna caspia Pallas. Nov. Comm. Petrop. 1770. 14: 582, pl. 22, fig. 2
Sterna cayana DeKay. Zool. N. Y. 1844. pt 2, p. 299, fig. 277
Sterna tschegrava A. O. U. Check List. Ed. 2. 1895. No. 64

ster'na, from Eng. stern or tern; *cas'pia*, of the Caspian sea

Description. *Adult in summer:* Large; crown and occipital crest glossy greenish black; neck, tail and under parts white; mantle pale pearl-gray; primaries grayish black, heavily silvered, but the inner webs entirely gray; *bill very large, coral red; feet black. In fall and winter:* Similar but the top of the head with only streaks of black. *Immature:* Top of the head streaked with black and the upper parts spotted and barred with blackish; bill paler color.

Length 20–23.5 inches; extent 50–55; wing 15–17.5; tail 5–6.75, forked 1.5; bill 2.5–3.1; depth of bill .9; gape 4; tarsus 1.75; tibia bare .75; middle toe 1.65.

The Caspian tern was not mentioned by Giraud or DeKay as occurring in the State. It is cosmopolitan in distribution and is a regular but rather uncommon transient visitant both on the coast and the larger lakes of New York. It breeds both south of us and far to the northward, but nowhere within our borders. A curious fact noticed by several observers is that they almost always appear in pairs on the autumn migration, a young bird escorted by an old one.

Shinnecock bay, L. I. Sept. 7, 1882. ♀. Adult and juvenal. Dutcher, Auk, 1: 34
" Sept. 13, 1882; Sept. later. Adult and juvenal. Dutcher, Auk, 1: 34
Atlanticville, L. I. Aug. 1885. Adult and juvenal. (Lucas & Buck). Dutcher, L. I. Notes
Long Island. Sept. 9, 1885. (Maguire & Chapman). Dutcher, L. I. Notes
Good Ground, L. I. Aug. 12, 1889, (1); Aug. 21, 1889, (6). (Hendrickson). Dutcher, L. I. Notes
Kendall, Orleans co. Sept. 1890. ♂. (Bruce). Posson, Auk, 16: 193
Buffalo, N. Y. Fall of 1893. ♂. Juvenal. Savage, Auk, 12: 313
Sandy Creek, Orleans co., N. Y. Sept. 1, 1894. ♂ adult, ♀ juvenal. David Bruce
Canandaigua, N. Y. Apr. 28, 1895. 3 seen, 2 taken. E. H. Eaton
Buffalo, N. Y. Aug. 21, 24, 1895. James Savage
Lake Ontario, Monroe co., N. Y. Sept. 2, 1897. ♂ adult and juvenal. George F. Guelf
Monroe co., N. Y. Several specimens mounted at Ward's. Truman R. Taylor
Strawberry Island, Niagara river. Sept. 20, 1899, 1 taken; Sept. 27, 1899, 2 taken. (Koeler). James Savage
Great South bay, L. I. July 21, 1900. 1. Braislin
Canandaigua, N. Y. May 5, 1906. Small flock. M. Blake and F. Antes
Erie, Pa. Sept. 15, 1888. Sennett, Auk, 6: 198
" " Todd, Birds of Erie, etc. p. 506
" Oct. 6, 1892. (Bacon). Todd, Birds of Erie, etc. p. 506
" Sept. 21, 1901. " " "
" Sept. 4–Oct. 3, 1900. "Rather common." Todd, Birds of Erie, etc. p. 506
" Apr. 26, 1902, (3). (Simpson). " "

Sterna maxima Boddaert

Royal Tern

Plate 8

Sterna maxima Boddaert. Table des Planches Enluminéez. 1783. p. 58
A. O. U. Check List. Ed. 2. 1895. No. 65

max'ima, Lat., largest

Distinctive marks. Resembles the Caspian tern. Bill deep orange instead of coral-red as in caspia, *much slenderer;* tibiae bare .9 instead of .75 inches; tarsus shorter; tail relatively longer and forked for half its length; occipital crest much more prominent; black on the head does not extend as far down on the lores; inner webs of quills with their inner margins abruptly white.

Length 18–20 inches; extent 42–44; wing 14–15; tail 6–8; forked 3–4; bill 2.5–2.75; depth of bill .7; gape 3.75; tarsus 1.37; middle toe and claw 1.4.

The Royal tern is a species of tropical and austral distribution, breeding as far north as Cobb's Island, Va., and is an accidental summer visitant on our coast. The only authentic specimen from this State was taken at Raynor South, L. I., August 27, 1831, by J. F. Ward, and is now in the American Museum, Lawrence Collection. Giraud describes it under the name of Cayenne tern, but evidently confuses it with the Caspian tern which he does not mention, for he gives the coast of Labrador as its breeding range, following Audubon's misstatement, and says that Mr Bell received a number of specimens from various sections of Long Island. DeKay likewise confused it with the Caspian tern, his description of S. cayana evidently referring to that species.

Sterna sandvicensis acuflavida (Cabot)

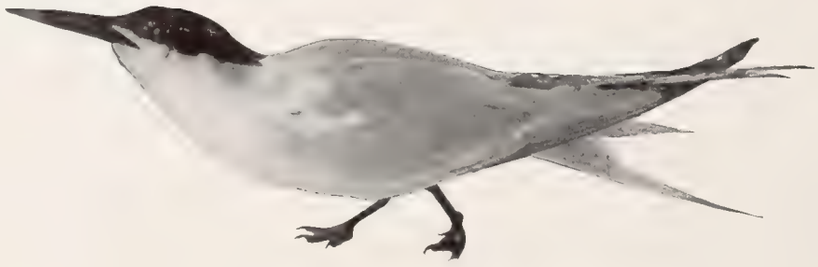
Cabot Tern

Sterna acuflavida Cabot. Boston Soc. Nat. Hist. Proc. 1842. 2: 257
Sterna cantiaca DeKay. Zool. N. Y. 1844. pt 2, p.303, fig. 274
Sterna sandvicensis acuflavida A. O. U. Check List. Ed. 2. 1895. No. 67

sandvicen'sis, of Sandwich, Kent; *acuflav'ida*, Lat., *acus*, point, and *flavidus*, yellowish

Distinctive marks. Bill *black, tipped with yellow.* Like the Royal tern in plumage and proportions, but only slightly larger than the common tern.

Length 15–16 inches; extent 34; wing 12.5; tail 6; forked 2.35; bill 2.25; depth of bill .48; tarsus 1.



Cabot tern. Sterna sandvicensis acuflavida (Cabot). From specimen in State Museum. ¼ nat. size

The Cabot, or Sandwich tern, is an inhabitant of the warmer seacoasts, the American bird being almost identical with the Old World form. Our bird breeds as far north as South Carolina, and has wandered up the coast

to Massachusetts. As a New York species it rests on the record of Lawrence, [Lyc. N. Y., Ann. 1866. 8: 299]; and DeKay, page 303, who states that it has occurred on our coast.

Sterna trudeaui Audubon

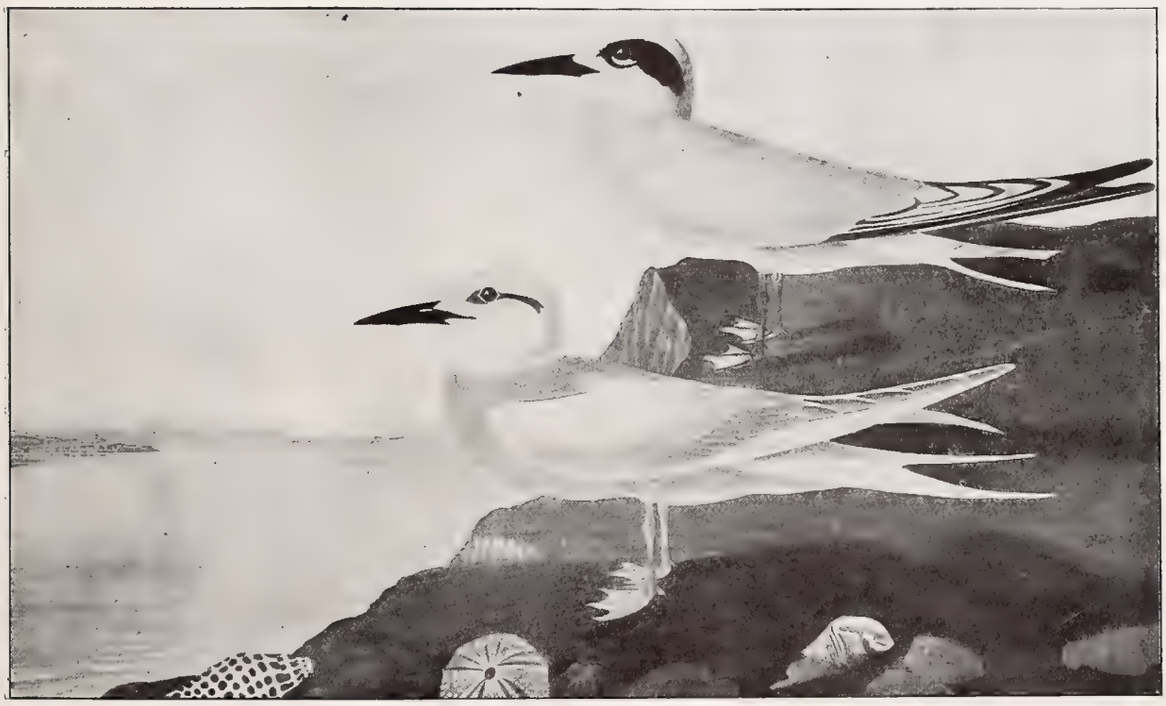
Trudeau Tern

Sterna trudeaui Audubon. Ornithological Biographies. 1839. 5: 125, pl. 409
A. O. U. Check List. Ed. 2. 1895. No. [68]

trudeau'i, of Dr James Trudeau

Distinctive marks. Bill *yellow at base and tip with a broad black band* between; feet reddish; *head white* with a narrow slaty black bar on its sides passing through the eye; the rest of the plumage uniformly pale pearl-color; except the rump, tail, underwings, tips and inner veins of the secondaries, and the shafts of the primaries together with spaces on their inner veins, which are white.

Length 14 inches; wing 10.25; tail 6.5, forked 2.75; bill 1.5–1.7; depth of bill .38; tarsus .9; middle toe and claw 1.05.



Upper figure, Forster tern. Sterna forsteri Nuttall. Lower figure, Trudeau tern. Sterna trudeaui Audubon. From Audubon, *Birds of America*

The Trudeau, or White-headed tern, is an interesting neotropical species, which has been taken once on Long Island, as reported by Audubon in his *Synopsis of the Birds of North America*, page 319, and in the *Ornithological Biography*, volume 5, page 125, also in Giraud's *Birds of Long Island*, page 354. The record is also credited by Baird, Brewer and Ridgway, *Water Birds*, volume 2, page 291, and Chapman's *Hand Book*, page 80, and Chamberlain, *Revised Edition of Nuttall*, page 228. Audubon's type specimen is in the Giraud Collection, Vassar College Museum. It was collected by Dr Trudeau at Absecum Beach, Egg Harbor, N. J. Unfortunately the incidents and dates connected with the capture of the Long Island specimen were not definitely recorded, but there is no reason to believe that Audubon was mistaken regarding the identity of the bird.

Sterna forsteri Nuttall

Forster Tern

Plate 7

Sterna forsteri Nuttall. Manual. 1834. 2: 274
A. O. U. Check List. Ed. 2. 1895. No. 69

for'steri, of John Reinhold Forster

Distinctive marks. *Bill larger* than in the Common tern, dull orange with dusky tip; black cap does not extend as far down as in hirundo, leaving more white between the eye and upper mandible; wings relatively shorter; primaries silvery, the outer web of the first not black; wings whiter than in the other species; under parts and rump white; mantle and tail pale pearl-gray; outer tail feathers *white on their outer webs, gray on the inner;* feet orange-red. *Adult in winter:* Tail less forked, the peculiar pattern of the outer feathers less distinct; crown white more or less tinged on the back of the head with gray; a black stripe from before the eye back across the ear coverts. *Young:* Similar, washed with grayish brown on the upper parts, and the primaries have more distinct spaces of white on their inner webs, like the Common tern.

Length 15 inches; extent 30; wing 9.5–10.5; tail 5–8, forked 2.5–5; bill 1.5–1.75; depth of bill .4; tarsus .9–1; middle toe and claw 1–1.1.

The Forster tern is an uncommon bird on the coast of this State, occurring as a transient in the fall. It has rarely been reported from the interior of the State, although it breeds at St Clair Flats and formerly did so on some of the islands in Lake Erie. It is a nearctic species, nesting from Texas to the fur countries. It undoubtedly escapes attention many times, especially in the fall, from its close resemblance to the Common tern. The only definite migration dates are:

Rockaway, L. I. Oct. 1, 1872; Sept. 3, 1873. N. T. Lawrence. Forest and Stream, 10: 13, 235
Good Ground, L. I. Sept. 7, 1882. Dutcher Collection, 190
Ram's Head Shoals, L. I. Sept. 17, 1883. " 1353
Saratoga lake, N. Y. Sept. 11, 1880. Rich, O. & O., 6: 91
Steuben co., N. Y. Fall of 1898. (Juvenal). A. H. Wood

Sterna hirundo Linnaeus

Common Tern

Plate 7

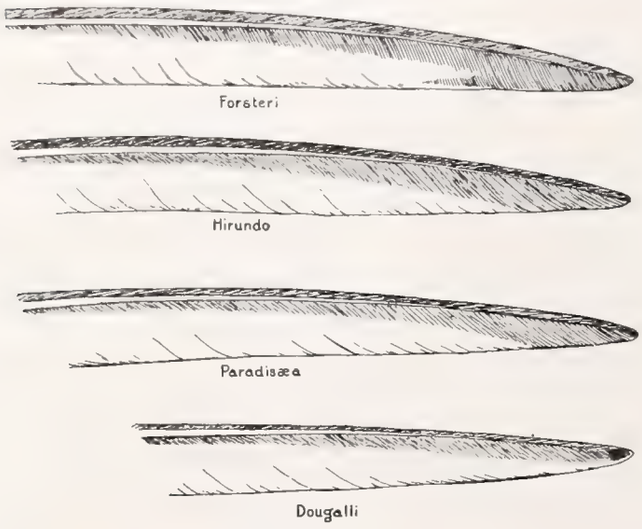
Sterna hirundo Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 137
DeKay. Zool. N. Y. 1844. pt 2, p. 298, fig. 275, 276
A. O. U. Check List. Ed. 2. 1895. No. 70

hirun'do, Lat., swallow

Description. *Breeding plumage:* Top of head black; mantle pearl-gray, deepest on the back; under parts similar but lighter than the mantle; borders of the cap, the throat, rump, under surface of wings, and axillaries white; first four or five primaries blackish, more or less silvered, and the inner webs with a space of white along the inner edge; lateral tail feathers *dusky* or *pearl-gray on the outer webs, white* or nearly so *on the inner;* bill vermilion red, changing to black at the tip; feet orange-red; iris dark brown. *In winter:* Similar, but the cap largely white toward the front; under parts white; bill and feet duller. *Immature:* Similar to winter adult but the upper parts more or less varied with light brown; *forehead grayish white; rump ashy;* smaller, and the tail shorter; bill yellowish at base, becoming blackish at tip; feet dull yellow.

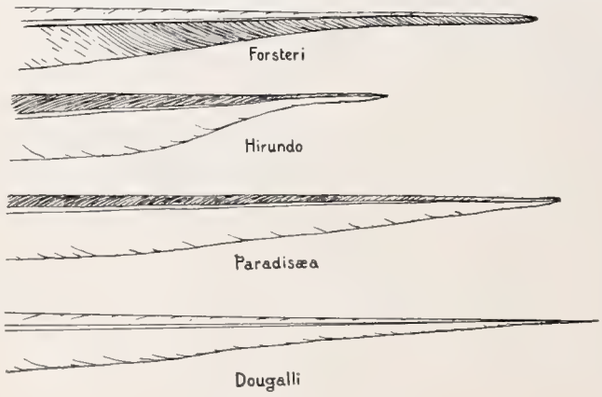
Length 13–16 inches; extent 29–32; wing 9.75–11.75; tail 5–7, forked 1 (in the young) to 3.5 in breeding birds; bill 1.25–1.5; depth .33; gonys .8; tarsus .66–.85; middle toe and claw 1.05. *Young:* Length 12; wing 9; tail 4; bill 1.12–1.15.

Distinctive marks. This tern resembles the Arctic and Forster terns but may be distinguished from the former by the color of its bill, which is *black at the tip* for one third of its length, its *tarsi* are *longer*, its primaries have less white, and the white line of feathers along the base of the upper mandible scarcely extends to the feathered point. It is distinguished from Forster tern by the color of its streamers, which are *white on their inner webs* and gray on the outer, while the reverse is the case in Forster. The adult specimens of the Common tern also have pearl-gray underparts in summer, instead of white, and their feet and legs are redder.



First primaries of terns

Distribution. The Common tern, Wilson tern, or Sea swallow is an abundant transient visitant along the shores of Long Island, and is still a common summer resident in the protected colonies, especially on the north and south ends of Gardiners island, and on Fishers island, where wardens are maintained by the Audubon Societies and the A. O. U. It formerly bred along the shores of Long Island in great numbers, and as late as 1882 Mr Dutcher found it nesting at South Oyster Bay in considerable numbers; in 1883 it was becoming scarce, and in 1884 very few were left at that station. In 1885 they bred all over Little Gull island, in 1888 only 300 pairs were left, and now they have deserted that station entirely on account of the disturbance caused by the neigh-



Outer tail feathers of terns

boring military station. This tern formerly bred on the Canadian shore of Lake Erie, not far from Buffalo, and at Presque Isle, Erie, Pa., but now is not known to nest on the Great Lakes nearer than the Chicken islands, Put-in-Bay, western Lake Erie. In the interior of this State this bird is a fairly common transient visitant, especially on the Great Lakes, but is not known to breed within our limits except on the seacoast, where it was an abundant summer resident in Giraud's day. It is a bird of holarctic range, in America breeding from the Gulf coast to Greenland.

Migration. The Common tern according to Giraud arrives from the South by the middle of April and departs late in the fall; Mr Dutcher's dates range from May 9 to October 15. In western New York it is most often seen in early June, and from August 8th to September 25th, although I have seen it as early as May 5th on Canandaigua lake and as late as October 9th. It has been reported from Lake Erie on the 15th of April, but I am inclined to think that is exceptionally early for this species in the interior. Mr Todd's earliest record for Erie, Pa., is April 26.

Habits. The tern, or Sea swallow, is often seen standing on spiles, rocks, or floating debris, but less often swimming on the water than the gulls. Like gulls it spends a large portion of its time flying back and forth over the water looking for the small fish and the aquatic insects which are its principal food. When flying, terns carry the bill inclined downward, instead of pointing forward in the axis of the body, as is the habit of gulls. They nest in large colonies and near such resorts the air is often filled with their graceful forms. When the colony is invaded the birds raise a great uproar and dart about the intruder. Their scream is a harsh *tearr, tearr.*

Nesting. Their eggs are laid in a mere depression in the sand or rubbish near the shore, or on a nest of grass or seaweed, sometimes among the growing grass. They are from two to four in number, usually three, of a buff or pale brown color shaded with olive, thickly spotted with chocolate or blackish and obscure lilac. Dimensions average 1.6 by 1.22 inches. The nestlings are grayish buff mottled with dusky. The eggs of the Forster, Common, Arctic and Roseate terns are practically indistinguishable.

Sterna paradisaea Brünnich

Arctic Tern

Plate 7

Sterna paradisaea Brünnich. Ornith. Borealis. 1764. p. 46
Sterna arctica DeKay. Zool. N. Y. 1844. pt 2, p. 302
Sterna paradisaea A. O. U. Check List. Ed. 2. 1895. No. 71

paradisae'a from *paradisus*, paradise

Distinctive marks. The first four or five primaries are similar to those of the Common tern, but the blackish on the inner web is less extensive, leaving only a small line of grayish along the shaft; tail white, streamers very long, the outer webs of the outside feathers grayish black, the inner webs slightly tinged with pearl-gray; bill is *slighter* and of a *rich carmine* color; tarsi and feet are *smaller*, of an intense carmine; the breast is of a *deeper lavender gray* than in the Common tern. *Young:* Scarcely distinguishable from those of the Common tern. Note the comparative dimensions carefully: "*forehead white;* shoulders darker than in hirundo; upper parts in general darker; the middle tail feathers *grayish*, bill, tarsi and feet *shorter* than in hirundo.

Length 14–17 inches; extent 29–33; wing 10–10.75; tail 6.5–8.5, forked 4–5; bill 1.2–1.4; depth of bill .3; gonys .75; tarsus .55–.65; tibia bare .45; middle toe and claw .8–.85. Young: bill 1.08–1.15; tail 4.75–5.

The Arctic tern is a rare bird in this State. It is barely mentioned by Lawrence and DeKay, and Bergtold gives it as an accidental visitant near Buffalo. Mr Dutcher has one specimen, a male taken on Ram island shoals, July 1, 1884. According to Brewster, [B. N. O. C., 4:15], the Arctic tern bred along the entire New England coast in 1878. It is a bird of holarctic distribution, breeding northward to unknown latitudes, and migrating southward in winter as far at least as Virginia on the American coast. It is remarkable that so few specimens have been taken on our coast, and those in summer!

Sterna dougalli Montagu

Roseate Tern

Plate 7

Sterna dougalli Montagu. Orn. Dict. Sup. 1813
DeKay. Zool. N. Y. 1844. pt 2, p. 304, fig. 280
A. O. U. Check List. Ed. 2. 1895. No. 72

dou'galli, in honor of Dr McDougall

Description. *Breeding plumage:* Mantle pearl-gray extending to the base of the tail; neck and under parts white *tinted with delicate rose-pink;* tail white, the streamers very long and white on both webs, turning grayish toward the tip of the inner; primaries similar to the Common tern, but shorter and the *white on the inner web covering more than half the space and extending to the tip;* bill black, reddish at the base; feet bright red. *In winter:* Front of the cap mixed with white and the under parts without the rosy tinge. *Immature:* Head white, marked on the top and back with brownish gray; eye and ear regions blackish; under parts white; upper parts pale pearl-gray, marked with buff and blackish; the feathers with submarginal dusky marks; bill and feet dusky brownish; tail slightly forked.

Distinctive marks. This species is easily distinguished in the breeding season by its slender elegant form, pure white tail, and rosy under parts.

Length 14–15 inches; extent 30; wing 9.25–9.75; tail 7–8, forked 3.5–4.5; bill 1.5, depth .35; gonys 1; tarsus .85; tibia bare .4; middle toe and claw 1. *Young:* Length 11; tail 4; bill 1.35.

The Roseate, or McDougall tern, is an "uncommon but regular summer resident on Long Island," arriving in May and departing in September or early October. A few pairs of this species have been found by Dutcher, Chapman and Braislin nesting among the colonies of the Common tern on Gardiner's, Fishers, and the neighboring islands. It is an accidental visitant in the interior of the State; one from Lake Keuka is reported in the Auburn List; one from Lake Erie in the Buffalo List; one from the Niagara river, May 31, 1886, in the Davison List. It is holarctic in range but confined to warm latitudes, on our side of the Atlantic breeding from Florida to Maine.

The habits of the Roseate tern resemble those of the commoner species but it is a more wary bird and its voice is quite characteristic, the alarm note being a harsh *cack,* very different from the call of the Common and Arctic species.

Sterna antillarum (Lesson)

Least Tern

Plate 7

Sternula antillarum Lesson. Descr. Mam. et Ois. 1847. 256
Sterna argentea DeKay. Zool. N. Y. 1844. pt 2, p. 305, fig. 273
Sterna antillarum A. O. U. Check List. Ed. 2. 1895. No. 74

antillā'rum, of the Antilles

Description. *Breeding plumage:* Crown and lores black; forehead white, extending over the eye; upper parts pearl-gray, with a leaden shade; under parts pure white; outer primaries black on the outer web and the shaft portion of the inner; bill bright yellow with dusky tip; feet orange-yellow. *In winter:* Bill dusky; back of head black; top of head spotted with black. *Immature:* Similar to winter birds, but the upper plumage more or less mottled with buffy and blackish, often in V-shaped pattern.

Length 9 inches; extent 20; wing 6.6; tail 3.5, forked 1.75; bill 1.2, depth .28; tarsus .6; middle toe and claw .75.

Distinctive marks. The adults of this species are easily recognized but the young are sometimes confused with that of the Black tern. Besides the general difference in structure, the size of the present species is considerably less, the wing being only 6.25 inches in length, while that of the immature Black tern is 7.75 inches or more. The upper parts of the Least tern are much lighter and the under parts are pure white.

The Least tern was formerly a common summer resident on Long Island. Mr Worthington found it breeding at the eastern end of Long Island as late as June 2, 1880, and Mr Dutcher noted it nesting in numbers on South Oyster Bay on July 11, 1882. It may possibly be regained as a breeding species by careful protection of the nesting sites. It has been recorded from the interior of the State by DeKay, Rathbun, Ralph & Bagg, Bergtold, and Eaton, but it is probable that the records on which these reports were based are partly in error, as all the specimens from the interior of this State, which I have had the privilege of examining, proved to be juvenile specimens of the Black tern. On the coast it occurs now as a rare migrant or summer visitant. It inhabits tropical and temperate North America, and is closely related to the neotropical superciliaris and the palearctic minuta.

Sterna fuscata Linnaeus

Sooty Tern

Plate 7

Sterna fuscata Gmelin. Syst. Nat. 1766. Ed. 12. 1: 228
A. O. U. Check List. Ed. 2. 1895. No. 75

fuscā'ta, Lat., dusky

Description. *Adult: Lores, crown and upper parts black*, deepest on the top and back of the head; forehead, extending over the eye, white; outer tail feathers mostly white; under parts white; bill and feet black. *Immature:* Sooty brown, dark above, but fading to grayish on the belly; the lining of the wings, scapulars and tail coverts tipped with white, giving the bird a "peculiar spotty appearance."

Length 15–17 inches; extent 34; wing 12; tail 7.5, forked 3–3.5; bill 1.8, depth .5; gape 2.5; tarsus 1; middle toe and claw 1.2.

The Sooty tern, a bird of general distribution in tropical regions, is an accidental visitant on the coastal and inland waters of New York. In the years, 1876 and 1878, there was a marked invasion of these terns in New York and New England. Ten or more specimens have been recorded from New England. New York records are as follows:

Oswego, N. Y. "About 1875." D. D. Stone
Lake Champlain, N. Y. Sept. 6, 1876. Merriam, Auk, 1: 59
Owasco Lake, N. Y. Sept. 20, 1876. Fowler, Forest and Stream, 7: 230; N. O. C. Bul., 2: 76
Lake Ronkonkoma, L. I. Sept. 13, 1878. Dutcher, Auk, 3: 433
Highland Falls, N. Y. Sept. 13, 14, 1878. Mearns, Es. Inst. Bul., 12: 87
Montauk, N. Y. Sept. 18, 1883. (W. W. Worthington). Dutcher Collection, 1355

Hydrochelidon nigra surinamensis (Gmelin)

Black Tern

Plate 8

Sterna surinamensis Gmelin. Syst. Nat. 1788. Ed. 1. 2: 604
Sterna nigra DeKay. Zool. N. Y. 1844. pt 2, p. 300, fig. 278, 278a
Hydrochelidon nigra surinamensis A. O. U. Check List. Ed. 2. 1895. No. 77

hy'drochelī'don, Gr. ὕδωρ, water, and χελιδών, swallow; *nĭ'gra*, Lat., black; *surinamē'nsis*, of Surinam, Dutch Guiana

Description. *Adult in summer:* Head, neck, breast and belly, black; back, wings, and tail dark plumbeous or slate-color; primaries grayish

black, silvered on the inner edge and the shafts white toward the base; lining of wings and extreme edge of lesser wing coverts ashy white; under tail coverts pure white; bill black; mouth lake red; feet reddish brown; iris brown. *In winter:* Head, neck and under parts white, marked on the crown, nape, eye and ear region with blackish; patches of black in the white while moulting. *Immature:* Resemble adults in winter plumage, but the upper parts are more or less washed or marked with brown, especially on the back, which is quite brown in the interscapular region; sides more or less ashy brown.

Length 9–10.25 inches; extent 23–25; wing 8.25; tail 3.3–3.75, forked .9; bill 1.1, depth .25; gape 1.6; tarsus .66; middle toe and claw .95.

Distinctive marks. This bird should not be mistaken for any of our other terns, for its general structure is quite different, belonging as it does to a separate genus with well marked characters. The bill is very sharp and slender, shorter than the head, longer than the middle toe; angle of gonys very acute; wings very long, pointed and without distinct markings; primaries broad, not acute; secondaries not flowing; tail short, only slightly forked, without streamers; feet short and slender, webs deeply incised; colors dark. The young also differs from the Least tern in being larger, browner on the back and tinged with grayish brown on the sides.

The Black, or Short-tailed tern, is a fairly common migrant on the coast and larger inland waters of New York State. It is chiefly a species of the interior and is consequently somewhat irregular on the Long Island coast, but often appears in flocks of hundreds during the fall migrations. Such flights are recorded in Dutcher's Long Island Notes, especially on September 1–10, 1882, and September 5, 1884. His dates range from July 12 to September 14, there being no spring record for the coast, but Mr W. A. Mead reports it for Carmel, Putnam county, April 9th, 1896. In western New York it makes its appearance late in April—April 27 (Erie, Pa.), April 28 (Canandaigua), and "April 1893" (Utica). It occurs on all the inland lakes, most commonly in the fall from August 12 (Cohoes), August 17 (Canandaigua) and August 18 (Schroon lake) to September 30 (Penn Yan) and October 2 (Niagara river). It is also a summer resident in the marshes at the eastern end of Lake Ontario.

Nesting. I am pleased to report that the Black, or Short-tailed tern, is a regular summer resident in the marshes near the mouth of Big Sandy creek, Jefferson county, N. Y. According to Dr R. L. Crockett, Mr L. C. Snyder and Mr J. W. Soule the birds begin to lay during the last week in May, making their nests on sunken muskrat houses, floating boards, or debris, merely gathering together a few straws on which to deposit the eggs which are from two to five in number, usually three. Dr Crockett writes that the eggs are sometimes found as late as the last of July and thinks

Nest and eggs of Black tern. (From *Bird-Lore;* photo by Bent)

that two broods are reared. Mr Snyder estimated that there were 150 pairs of breeding birds in 1903. Mr William Hagedone, keeper of the Life Saving Station, writes that in 1905 there were probably 1000 birds in the marshes; that they arrive about the first of June, lay four eggs in a nest, the young "are all out" by the 4th of July, that no one shoots them, and they are all gone by the 1st of September. Mr Foster Parker of Cayuga has found it breeding in the Montezuma marshes on a few occasions. The eggs are brownish olive, quite heavily spotted and splashed with light brown, brownish black and obscure shell markings, dimensions 1.35 x .95

inches. This American representative of the species nigra breeds from Kansas and the Great Lakes to Alaska, migrating to the tropics and far into South America in winter. In flight its wings seem excessively long and at a distance it bears a great resemblance to the Nighthawk in size and color as well as in its wing strokes and habit of hawking about over the marshes in search of insects. I have little doubt that many of our April dates for the arrival of the Nighthawk in New York really belong to this bird. While searching the lake for food it carries its bill pointing downward like the other terns and often plunges into the water for the minnows with which its diet is varied.

Family RYNCHOPIDAE

Skimmers

Bill hypognathous, the lower mandible being considerably longer than the upper, *compressed* also, the *lower mandible being thin like a knife blade with an obtuse end.* The upper mandible is much less compressed and has a groove for the reception of the bladelike under mandible, and is hinged near the base, so as to admit of free movement; tongue stumpy; wings exceedingly long; legs and feet very small; tail slightly forked. Skimmers fly low over the surface of the sea, inclining the fore part of the bodies downward, with slow and measured wing beats, often cutting the surface of the water with their knifelike bills and "plowing up" their food of small marine animals. They are partially nocturnal in habits and hunt their food in close-ranked companies. Their voice is "hoarse and raucous," otherwise their habits resemble the terns to which they are closely allied. This is a family of very few species, confined mostly to the tropical region, only one species reaching the United States.

Rynchops nigra Linnaeus

Black Skimmer

Plate 7

Rynchops nigra Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 138
DeKay. Zool. N. Y. 1844. pt 2, p. 297, fig. 272
A. O. U. Check List. Ed. 2. 1895. No. 80

ryn'chops, Gr. ῥύγχος, beak, and ὤψ, face; *nĭ'gra*, Lat., black

Description. Upper parts black; forehead, sides of the head, under parts, tips of secondaries, and outer tail feathers white; bill carmine, black

toward the tip; feet carmine; iris hazel. *Immature:* Upper parts grayish brown; under parts white; bill and feet duller colored, bill smaller, imperfectly formed; tail less forked.

Length 16–20 inches; extent 42–50; wing 13–16.5; tail 4–6, forked 1.5; bill, upper mandible 3; under mandible 3.5–4.5; gape 4.5; depth of under mandible .6; tarsus 1.45; middle toe and claw 1.3.

The Black skimmer, Scissor bill, Cutwater, or Shearwater, is an occasional summer visitant off the shores of Long Island, but is not known to breed north of Egg Harbor, N. J. Giraud wrote, "It is not very common with us," but DeKay said, "It is common enough with us." The following recent records are all that have come to my attention:

Rockaway, L. I. July 26, 1876, (2); Sept. 3, 1876. N. T. Lawrence, Forest and Stream, 10: 235
South Oyster Bay, L. I. Aug. 2, 1884. Grinnell, Forest and Stream, Aug. 7, 1884
Amityville, L. I. May 6, 1893, (2). (Chichester). Dutcher
" May 20, 1898. " Braislin, p. 41
Whitesboro, Oneida co., N. Y. Fall of 1893. Bagg, Auk, 11: 162

Order TUBINARES

Tube-nosed Swimmers

Order Procellariiformes, Sharpe's Hand-List

Nostrils tubular; bill epignathous, hooked and enlarged at the tip; covering of bill in several horny plates, showing sutures between; hind toe very small or wanting, elevated; wings usually long and pointed; ten stiff primaries; 10 to 30 short secondaries, the fifth wanting; tail rather short, usually of 12 or 14 feathers; palate schizognathous; nasals holorhinal; also numerous other characters of internal anatomy; plumage very compact and oily; the body often so fat that it can be used as a lamp or candle; sexes alike; seasonal changes in plumage, if any, not determined; color inclining to uniformity, mostly sooty and white; a single egg laid on the ground or in a burrow.

These birds are pelagic in distribution, frequenting the shore only for purposes of reproduction, and never found inland except when driven astray by storms. The species are largely cosmopolitan, often ranging

over the entire ocean, the petrels, or Mother Carey's chickens, and albatrosses being among the best known of birds. There is an unusual range in size in this order from the Stormy petrel, the smallest of natatorial birds, to the Giant albatross whose wing expanse is unsurpassed in the whole bird kingdom. They have no equals in the power of flight, even among the Longipennes, practically living in the air and snatching their food of marine animals and oily matter from the surface of the sea. Authorities are at variance as to the number of families but four are usually recognized. The albatrosses (Diomedeidae) and diving petrels (Pelecanoididae) are not found in the nearctic region.

Family PUFFINIDAE

Fulmars, Shearwaters and Petrels

Medium or large in size; first primary as long or longer than second; basipterygoids present; coracoids short, with broad bases and widely diverging axes; hypocleidium of furcula short; sternum with uneven posterior margin.

The fulmars (Fulmarinae) have the bill stout, the nasal tubes prominent with a thin partition between them, the under mandible not hooked, the upper mandible with rudimentary or well developed lamellae, and the tail of 14 or 16 feathers. The shearwaters and petrels (Puffininae) have the under mandible hooked, the tubes low with thickened partitions, no lammellae, and the tail of 12 feathers.

Fulmarus glacialis (Linnaeus)

Fulmar

Procellaria glacialis Linnaeus. Syst. Nat. 1766. Ed. 12. 1: 213
Fulmarus glacialis A. O. U. Check List. Ed. 2. 1895. No. 86

ful'marus from Eng. fulmar; *glaciā'lis*, of the ice

Description. Head, neck and under parts white; mantle pearl-gray; bill greenish yellow; feet gray, or yellowish; quills ashy brown. *Dark phase:* Upper parts smoky gray, somewhat paler below.

Length 18–20 inches; wing 12.5–13.5; tail 4.5–5; bill 1.3–1.8; average 1.5; depth of bill .75; tarsus 2.

The Fulmar, or Noddy, of the north Atlantic has been taken in winter as far south as Massachusetts and New Jersey, although we can find no valid record of its occurrence within the limits of New York State. It is undoubtedly an occasional winter visitant off our coast where it might easily be overlooked by the inexperienced because of its general resemblance to the common gull.

Puffinus borealis Cory

Cory Shearwater

Puffinus borealis Cory. N. O. C. Bul. April 1881. 6: 84
A. O. U. Check List. Ed. 2. 1895. No. 88

puff'inus from Eng. puffin; *boreā'lis*, Lat., northern

Description. Brownish ash, tipped with white on neck and upper tail coverts; white below; under eyelids and under tail coverts mostly white; bill yellowish.

Length 20.5 inches; wing 14.5; tail 6.5; bill 2.25; depth of bill .75; tarsus 2.2; middle toe and claw 2.9.

The Cory shearwater was first described from a specimen taken on Cape Cod, Chatham Island, October 11, 1880 [*see* N. O. C. Bul. 6: 84]. Numerous specimens have since been taken on the coasts of Massachusetts and Long Island. From the latter part of September till November 1886, this Shear-

Cory shearwater. Puffinus borealis Cory. From specimen in American Museum of Natural History, ⅔ nat. size

water appeared in enormous numbers off Point Judith, R. I., Buzzard's bay and Vineyard sound, Mass., feeding on the herring which occurred there in unusual abundance [*see* Baird, Auk, 4:71]. The following are our New York records:

Gardiners bay, L. I. Sept.–Oct. 1886. (Worthington). Chadbourne, Auk, 5: 202
Amagansett, L. I. About Oct. 18, 1887. Dutcher, Auk, 5: 175
Ram island shoals, L. I. Oct. 20, 1887. ♂ ♀ Dutcher Collection
Little Gull Island. Aug. 6–16,1888. (2). Dutcher, Auk, 6: 128
Montauk, L. I. Nov. 29, 1889. (1). (Scott). Dutcher, L. I. Notes
Off Fire island inlet, L. I. Oct. 4, 1902. (2). Braislin, Auk, 21: 287

It is an uncommon summer visitant off Long Island but its breeding grounds, probably in the southern seas, are unknown. By the early writers it was confused with the Greater shearwater, but, as far as I know, no specimens have been found in the Giraud and Lawrence collections. According to Baird these shearwaters, as observed off the coast of Cape Cod, in 1886, occurred in flocks of from fifty to two or three hundred and were "generally found resting quietly on the water and feeding while swimming, on the herrings that were so abundant in the vicinity. They were very tame." According to Dutcher the specimens seen in Gardiners bay were associated with the jaegers and like them were engaged in the occupation of robbing the terns. He did not see them alight on the water.

Puffinus gravis (O'Reilly)

Greater Shearwater

Procellaria gravis O'Reilly. Voyage to Greenland. 1818. p. 140, pl. 12, fig. 1
Puffinus cinereus DeKay. Zool. N. Y. 1844. pt 2, p. 287, fig. 297, 298
Puffinus major A. O. U. Check List. Ed. 2. 1895. No. 89

grā'vis, Lat., heavy, great

Description. Upper parts fuscous, the feathers edged with ashy; white below, with brownish patches on the flanks; under tail coverts ashy gray; bill blackish.

Length 18–20 inches; extent 42–45; wing 13; tail 5.75, graduated for one inch; bill 2; depth of bill .65; tarsus 2.4; middle toe and claw 2.9.

The Greater shearwater, Wandering shearwater and Cinereus puffin of Giraud and DeKay, is recorded as a rare visitant to our shores by those early writers. Chapman calls it irregularly common from early June till November. Dutcher calls it "uncommon in summer," his only New York specimens (2) being from Gardiners bay, August 1884.

The long, narrow wings are set stiffly at right angles with the body, and the bird frequently glides half a mile at a time without moving them perceptibly. It usually follows a direct course, and invariably skims over the waves. I know of no other sea bird whose movements are as easy and graceful. [Brewster]

Greater shearwater. Puffinus gravis (O'Reilly). From specimen in State Museum, ¼ nat. size

Puffinus puffinus (Brünnich)

Manx Shearwater

Procellaria puffinus Brünnich. Ornith. Borealis. 1764. p. 29
Puffinus puffinus A. O. U. Check List. Ed. 2. 1895. No. (90)

In color similar to Audubon shearwater.

Length 13.5–15 inches; extent 30–33; wing 8.75–9.25; tail 3.1, graduated .75; bill 1.4; depth of bill .45; gape 2.1; tarsus 1.8.

The Manx shearwater is of rare, or accidental occurrence, in North America. Giraud and Lawrence recorded it from Long Island, but as no specimens from that locality have been found in their collections, it is probable that their records refer to the next species.

Puffinus lherminieri Lesson

Audubon Shearwater

Puffinus lherminieri Lesson. Rev. Zool. April 1839. 102
Puffinus obscurus DeKay. Zool. N. Y. 1844. pt 2, p. 288, fig. 294
Puffinus auduboni A. O. U. Check List. Ed. 2. 1895. No. 92

lherminieri, of Felix Louis L'Herminier

Description. Above dark brownish black, white below, marked with blackish on flanks and under tail coverts; bill dull leaden blue, blackish at tip; webs and inside of tarsi yellowish, outer sides brownish.

Length 11–12 inches; extent 26; wing 7.5–8; tail 4.25, graduated one inch; bill 1.25; depth of bill .4; gape 1.7; tarsus 1.6; middle toe and claw 1.8.

Audubon shearwater. Puffinus lherminieri Lesson. From specimen in State Museum. ½ nat. size.

The Audubon shearwater, also called Dusky and Little Shearwater, is a southern species and rarely visits the coast of this State. The only recent record is of a specimen taken in Great South bay, opposite Bellport, L. I., August 1, 1887 [*see* Dutcher, Auk, 5:173].

"Its flight, low over the water, is strong and swift, five or six rapid wing beats being followed by a short sail." [Chapman]. According to Giraud and DeKay it is an occasional straggler to the coast of Long Island.

Puffinus griseus (Gmelin)

Sooty Shearwater

Porcellaria grisea Gmelin. Systema Naturae. 1788. 1: 564
Puffinus stricklandi A. O. U. Check List. Ed. 2. 1895. No. 94

gri'seus, Lat., dark

Description. Sooty black; under parts slightly grayish; bill and eye blackish.

Length 16–18 inches; extent 40; wing 11.5–12; tail 4; bill 1.75–2; gape 2.33; tarsus 2.25; middle toe and claw 2.5.

Sooty shearwater. Puffinus griseus Strickland. From specimen in American Museum of Natural History. $\frac{2}{3}$ nat. size

The Sooty shearwater, or Black hagdon, appears off our coast in summer associated with the Greater and Cory shearwaters, but is less common than Puffinus major with which it agrees in habits. At a distance, according to Brewster, "it looks as black as a crow," and hence can easily be distinguished from the other species. This bird is now regarded the same as the Old World species, but for years was held to be distinct.

Aestrelata hasitata (Kuhl)

Black-capped Petrel

Procellaria hasitata Kuhl. Mon. Proc. Beitr. Zool. 1820. 1 Abt., p. 142
Aestrelata hasitata Kuhl. A. O. U. Check List. Ed. 2. 1895. No. (98)

aestrē'lata (more correctly oestrelata), Gr. οἰστρήλατος, driven by a gad-fly, frantic; *hasitā'ta* (more correctly haesitata), Lat., stuck, the discoverer was in doubt about it (Coues)

Description. Cap, bar on side of the head, mantle, wings and end of tail, fuscous; rest of head, neck, base of tail and under parts white; bill and feet black; legs flesh-colored.

Length 16 inches; extent 39.5; wing 11.5–12; tail 5.25, gradation 1.5; bill 1.4; depth of bill .66; tarsus 1.4; middle toe and claw 2.12.

This species is a rare straggler from the southern seas, sometimes being driven inland by storms. A specimen from Quogue, Long Island, July 1850, is recorded by G. N. Lawrence in the Annals of Lyceum of Natural History of New York, volume 5, page 220. A specimen was secured on Verona beach, Oneida lake, August 28, 1893, by Rev. G. A. Biederman and reported by Bagg [Auk, 11:162]. Mr L. S. Foster reports a specimen in his collection "taken in Cayuga county, September 1893." Another specimen was captured alive in a snow bank at New Paltz, Ulster co., January 26, 1895, recorded by Foster [Auk, 12:179].

Aestrelata scalaris Brewster

Scaled Petrel

Aestrelata scalaris Brewster. Auk, July 1886. p. 300
A. O. U. Check List. Ed. 2. 1895. No. (99)

scalā'ris, Lat., pertaining to a ladder, referring to the markings on the back

Description. Cinereous above and running down the sides of the neck, sides and abdomen; under parts white; immaculate on the chin, throat, center breast and the under tail coverts; feathers of back and wing coverts tipped with white, giving it a peculiar scaled appearance.

Wing 9.88 inches; tail 3.95, graduated .9; bill 1.03; hight of bill .46; tarsus 1.37; middle toe and claw 1.7.

For the original and complete description the reader is referred to Brewster, *Auk*, volume 3, pages 389–93.

This species was made known to the scientific world from a specimen secured in this State and noted by Mr Brewster, in Bulletin Nuttall Ornithological Club, volume 6, pages 91–97. The story of its discovery may be interesting to some of our readers. "Some months since while passing the natural history store of W. J. Knowlton, Tremont street, Boston, my attention was attracted by a mounted petrel, which, with spread wings, hung conspicuously in the window. I saw at once it was a species new to me and, upon entering, was greatly astonished to learn that it had been received only a short

Scaled petrel. Aestrelata scalaris Brewster. Photo from type specimen taken at Mount Morris. Now in Mr Brewster's collection. $\frac{1}{6}$ nat. size

time before *in the flesh*, and in a comparatively fresh condition. Further inquiries elicited the information that it had been mounted for Mr E. H. Woodman of Concord, N. H., and upon writing to that gentleman, I was very kindly put in the possession of the following particulars. The bird had been sent him by a client, Mr Nathan F. Smith, who conducts a large farm at Mt Morris, Livingston co., New York. One of the laborers while ploughing an old cornfield, noticed it running in a freshly turned furrow and despatched it with a stick. It was apparently exhausted, for it made no attempt to escape. This was early in April 1880, probably not far from the 5th of the month, as I find its reception recorded on Mr Knowlton's books as April 10. A letter afterwards received from Mr Smith confirms all of these facts, but adds nothing of interest, save that the farm com-

prises what is known as flats, lying along the Genesee river, about 40 miles south of Lake Ontario." Other specimens have since been taken in New Zealand, one of which is in the State collection.

Family PROCELLARIIDAE

Stormy Petrels

Small in size; first primary shorter than second; both mandibles hooked; nasal tubes prominent with thin partition; tail of 12 feathers; wings of moderate length; hallux minute; no basipterygoids; coracoids slender, their axes only slightly diverging; a long manubrium of the furcula; rear border of sternum even.

Stormy petrel. Thalassidroma pelagica (Linnaeus). From Audubon, *Birds of America*

There are two well marked subfamilies of the Stormy petrels, which some would give the rank of families. The *Procellariinae* are short-legged, tibia slightly bare, with numerous secondaries, and sharp, curved, compressed claws. The Oceanitinae have *long legs*, the tibia bare an inch or more, *only* 10 *secondaries*, and broad, flat, blunt claws.

Thalassidroma pelagica (Linnaeus)

Stormy Petrel

In color similar to Wilson petrel, excepting the wing coverts, which are not tipped with whitish as in that species. Size much smaller.

Length 5.5–5.75 inches; wing 4.5–4.8; tail 2.5; bill .45; tarsus .9; middle toe and claw .82.

The Stormy or Least petrel is said to be the most abundant species of bird in the world. Though common on the European side of the Atlantic, it is rarely found on the American side. It has been ascribed to Long Island by Giraud and Lawrence, but no definite records have been given and no specimens of this bird from Long Island have been found in their collections. If it occurs at all on our coast, it must be very rarely, or at a considerable distance offshore.

Oceanodroma leucorhoa (Vieillot)

Leach Petrel

Procellaria leucorhoa Vieillot. Nouv. Dict. d'Hist. Nat. 1817. 25: 425
Thalassidroma leachi DeKay. Zool. N. Y. 1844. pt 2, p. 291, fig. 295
Oceanodroma leucorhoa A. O. U. Check List. Ed. 2. 1895. No. 106

oceanŏ'droma, Gr. Ωκεανός, ocean, and δρόμος, running; *leuco'rhoa*, Gr. λευκός, white and ὄῤῥος, rump

Description. Sooty blackish, browner below; wing coverts grayish brown; upper tail coverts white, the shorter ones mixed with brownish; bill and feet black; iris brown; *tail forked.*

Length 7.5–8.9 inches; extent 17–18; wing 6–6.5; tail 3.5–4, *forked* .75–.9; tarsus .9–1; middle toe and claw 1; bill .67.

The Leach or common Forked-tail petrel inhabits the seas of the holarctic region in general, breeding from the Hebrides and the coast of Maine northward, and migrating southward in winter as far as Virginia and

Leach petrel. Oceanodroma leucorhoa (Vieillot). From Audubon. *Birds of America.* ⅜ nat. size

California. It has been noted as a rare or rather uncommon migrant on our coast, from the days of Giraud to the present time, and sometimes wanders inland, especially up the Hudson river. This is the only petrel which breeds on the coast of the United States. It lays a single white egg in a burrow in the ground, and the birds come and go at night, the male usually taking charge during the day. The nestling is covered with a very fluffy, sooty down.

The following are the records of New York specimens:

Quogue, L. I. 1850. Dutcher, Auk, 5: 132; *see also* Lyc. Nat. Hist. Ann., 5: 220
Catskill, Greene co., N. Y. Oct. 19, 1874. Day, Forest and Stream, 3: 180
Lansingburg, N. Y. Nov. 13, 1879. (William Gibson). Thomas Heimstreet
Hudson river above Troy. Oct. 1879. Park, N. O. C. Bul., 5: 190
Lansingburg, N. Y. Nov. 3. 1886. (William Gibson). Austin F. Parks
Fire Island Light, L. I. May 4, 1888. ♂. Dutcher, Auk, 6: 132
Montauk Point Light. May 30, 1889. ♂. (Mulligan). Dutcher, Long Island Notes
" July 27, 1889. (Gurnett). " "
New Lebanon, Columbia co., N. Y. Oct. 17, 1889. (A. B. Davis). Park Collection, State Mus.
Montauk Point Light. June 15, 1890. ♀. (Scott). Dutcher, L. I. Notes
Opposite North Troy. Sept. 29, 1890. A. F. Parks, Mss.

Oceanites oceanicus (Kuhl)

Wilson Petrel

Procellaria oceanica Kuhl. Beitr. Zool. Mon. Proc. 1820. p. 136, pl. 10, fig. 1
Thalassidroma wilsoni DeKay. Zool. N. Y. 1844. pt 2, p. 290, fig. 271
Oceanites oceanicus A. O. U. Check List. Ed. 2. 1895. No. 109

oceani'tes, Gr. Ὠκεανίτης, son of ocean; *ocean'icus*, Lat., oceanic

Description. Sooty black, lighter below; upper tail coverts white, the shorter ones mixed with blackish; under tail coverts mixed with whitish; wing coverts grayish, margined with whitish; bill and legs black, the feet with yellow webs.

Length 7 inches; wing 5.9; tail 3–3.25; bill .5; tarsus 1.3; tibia bare 1; middle toe and claw 1.1.

This is the common petrel found about the shores of Long Island and occurs from May till late September (Chapman), when it departs for the

southern seas, where it nests during the antarctic summer. It thus represents with us better than any other species the reverse of normal migration. Mr Dutcher's dates are from June 1 to September 14. Sometimes it appears in great numbers at Rockaway, Fire Island inlet and Gardiners bay, during June, July and August. A specimen from Lockport, N. Y., October 1875, is reported by Davison, *Auk*, volume 1, page 294; and David Bruce had a specimen from Orleans county, N. Y., taken in November 1882.

This is the common Stormy petrel, or Mother Carey's chicken, of our sailors, which is so often seen coursing back and forth about the ship waiting for scraps of food to be thrown overboard.

Wilson petrel. Oceanites oceanicus (Kuhl). From Audubon, *Birds of America*. ⅓ nat. size

Order STEGANOPODES

Totipalmate Birds

Order Pelecaniformes, Sharpe's Hand-List

Feet completely webbed, the hind toe being large, low down and partly lateral, connected with the inner toe by a full web; bill horny, usually hooked at the tip and furnished with a nail; gape very capacious; nostrils very small or rudimentary; a gular pouch; tongue small and knoblike; palate decidedly desmognathous; basipterygoids wanting; sternum short and broad; upper arm bones very long.

Birds of this order number about seventy species included in six families, the darters, or snake birds (Anhingidae) not being found in New York,

and the tropic-birds and frigate-birds represented by accidental wanderers. They are all altricial or nidicolous in nature. The eggs are single or few, usually plain colored, but covered with a chalky incrustation. They build their nests on the ground, rocky ledges, or brushy trees near the water, and are wholly carnivorous in diet, the food consisting almost entirely of fish.

Family PHAËTHONTIDAE

Tropic-birds

Bill stout, nearly straight, pointed, the two mandibles of equal length; nostrils distinct, linear; head large; neck short; gular pouch very small and feathered; tail of 12 to 16 feathers, the two middle ones in the adult, plumelike and extremely elongated; wings rather long and pointed; primaries very long; feet small and the hind toe more elevated than usual in this order, but fully webbed; plumage satiny, mostly white.

The tropic-birds are confined to the warmer seas, six species being recognized, three of which reach the United States. They resemble terns in general appearance, are gregarious in habit, and strong and swift in flight. They lay a single egg in some hole in the rocky cliff. The egg, like many features of the family, is aberrant for this order, being mostly of a chocolate color like a kestrel's, boldly spotted and blotched with brown and black.

Phaëthon americanus Grant

Yellow-billed Tropic-bird

Phaëthon americanus Grant. Brit. Orn. Club Bul. Dec. 1897. 49: 24; Ibis Apr. 1898. p. 288
Phaëthon flavirostris A. O. U. Check List. Ed. 2. 1895. No. 112

phā'ëthon, Gr. & Lat., son of Helios, or the Sun; *americā'nus*, of America

Description. White; stripe through the eye, oblique wing bands, flank stripes and tail shafts black; bill and feet yellow, toes black. *Young:* similar, but marked with black bars and crescents.

Wing 7 inches; tail 16–21; bill 2.

A single specimen of this tropical species was captured near Knowlesville, Orleans co., N. Y., in September 1876. It was an immature bird and was taken alive and finally preserved by Rev. J. H. Langille, who

Yellow-billed Tropic-bird. Phaethon americanus Grant. New York specimen (immature) in State Museum. ¼ nat. size

describes its capture in *Our Birds and their Haunts*, page 615 [*see also* Coues, N. O. C. Bul. 5:63; *compare also*, Maynard's Birds of Eastern North America, p. 474].

Family **SULIDAE**

Gannets

Bill long, very stout at base, tapering and slightly decurved toward the tip, somewhat serrate and very deeply cleft; nostrils abortive; gular pouch naked but small; wings long and pointed; tail long and wedge-shaped of 12 to 18 feathers; legs short and stout, placed nearly at the center of body; head large; neck rather long; plumage compact; two carotids; ambiens femorocaudal and semitendinosus muscles present but the accessories absent; sternum long and narrow; coracoids directed forward; a remarkable development of the pneumatic cells extending beneath the skin and among the muscles.

There are eight or more members of this family, our species being common to the holarctic region, the others mostly to the tropical and subtropical seas. They are all maritime in habitat and gregarious in habits, congregating in immense numbers on their breeding grounds.

Sula leucogaster (Boddaert)

Booby

Pelecanus leucogaster Boddaert. Table des Planches Enluminéez. 1783. p. 57

Sula sula A. O. U. Check List. Ed. 2. 1895. No. 115

sū'la, Norse, sula; *leucogas'ter*, Gr. λευκός, white, γαστὴρ, belly

Description. Dark brown; breast and belly white; head and neck often streaked with white; bill, lores and feet yellowish; iris white. *Young*: grayish brown, paler below; bill dark.

Booby. Sula leucogaster (Boddaert). From specimen in American Museum of Natural History. ¼ nat. size

Length 30 inches; extent 50; wing 14.5–16.5; tail 6.5–9.5; bill 3.25–4; gape 5; tarsus 1.5–1.9; middle toe and claw 3.5.

The Booby inhabits the tropical seas of America and sometimes straggles northward to the coast of New York and New England. A specimen in the collection of the Long Island Historical Society was taken on Moriches bay, Long Island [*see* Dutcher, Auk, 10:270]. Its occurrence in this State was purely accidental.

Sula bassana (Linnaeus)

Gannet

Plate 9

Pelecanus bassanus Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 133
Sula americana DeKay. Zool. N. Y. 1844. pt 2, p. 295, fig. 269
Sula bassana A. O. U. Check List. Ed. 2. 1895. No. 117

bassā'na, of Bass rock, the famous nesting site of the species

Description. White; primaries and their coverts blackish; head and neck washed with light yellow; bill bluish gray; lores, gular sack and feet blackish; iris yellowish white. *Young:* grayish brown, spotted with white; belly mostly white; bill and feet dusky; iris green.

Length 30–40.5 inches; extent 72; wing 17–21; tail 9–10; bill 4; gape 6; tarsus 2; middle toe and claw 4.

The Gannet occurs on our coast as a regular spring and fall migrant March 20 to May 10, and October 5 to December 20; and a few are observed in winter, "3 to 4 miles out over the cod grounds." On rare occasions it wanders to the interior of the State. At Canton, N. Y., December 10, 1879, a specimen was captured on the Grasse river [*see* Lee, N. O. C. Bul. 5:190]; on Saratoga lake, November 11, 1880 [*see* (Rich) Merriam O. & O. 6:96].

The Gannet or Solan goose inhabits the North Atlantic, breeding on rocky cliffs from Nova Scotia northward, especially Bird Rock in the Gulf of St Lawrence, and Bass Rock, Firth of Forth. They feed on fish, which they secure by diving from a considerable hight in the air and pursuing under water.

Family **PHALACROCORACIDAE**

Cormorants

Bill as long as head, nearly cylindrical, strongly hooked at tip, edges jagged; gape very deep; wings strong, stiff and comparatively short; tail long, tipped and fan-shaped of 12 to 14 feathers; body heavy; neck long; legs set far back. Consequently cormorants stand in a more or less vertical position like grebes, and like them dive from the surface of the water, and pursue their prey, using their wings under water like the diving ducks. There are 30 or more species of Cormorant, inhabiting all parts of the world, 10 of them occurring in North America. Besides the two occurring in New York, a third, the Florida cormorant, has approached our western borders [*see* Langdon, Jour. Cin. Soc. Nat. Hist. 3:229].

Phalacrocorax carbo (Linnaeus)

Cormorant

Plate 9

Pelecanus carbo Linnaeus. Syst. Nat. Ed. 10. 1758. 1:133
Phalacrocorax carbo DeKay. Zool. N. Y. 1844. pt 2, p. 292
A. O. U. Check List. Ed. 2. 1895. No. 119

phalacrŏ'corax, Gr. & Lat., a cormorant, from φαλακρός, bald, and κόραξ, raven; *car'bo*, Lat., charcoal

Description. *Breeding plumage:* Mostly glossy black, the back and wing coverts bronzy gray edged with black; wings and tail grayish black; fringe of pouch, threadlike plumes on head and neck, and flank patches white; pouch yellow; iris green; feet black; occipital crest black. *Winter:* No crest or white feathers on the head and flanks. *Immature:* Brownish gray and blackish, darkest on the hind neck, rump, sides and under tail coverts; grayish below, the *belly* largely *white*. Tail of 14 feathers.

Length 34–40 inches; extent 60; wing 12–14; tail 6–7.75; bill 2.85–3.4; gape 4; tarsus 2.5.

The Common cormorant, or Shag, is a maritime species rarely found in the interior of the State, but occurs as a transient visitant in small numbers off the shores of Long Island, September 22 to November 8. Most of the records from the interior of New York probably refer to the next species, as I have seen no specimen from our inland waters.

The Common cormorant like the Gannet is characteristically maritime in habitat and agrees with that species in distribution.

Phalacrocorax auritus (Lesson)

Double-crested Cormorant

Plate 9

Carbo auritus Lesson. Traité d'Ornithologie. 1831. p. 605
Phalacrocorax dilophus DeKay. Zool. N. Y. 1844. pt 2, p. 293, fig. 267, 268
A. O. U. Check List. Ed. 2 1895. No. 120

aurī'tus, Lat., eared

Description. *Breeding plumage:* Mostly glossy black, the back and wing coverts coppery gray edged with black; a tuft of curly black feathers on each side of the head; a few white filaments over the eye; lores and pouch orange; eyelids and mouth deep blue; iris green; feet black. *Winter:* No crest; eyelids dull. *Immature:* Mostly grayish brown, blackish on rump, sides and lower belly; throat and breast brownish white; gular sack and base of bill yellowish. *Tail feathers* 12.

Length 30–34 inches; extent 50; wing 12–13; tail 6–7; bill 2.3–2.5; gape 3.5; tarsus 2.1.

This is by far the commonest of the order Steganopodes in our State. It is a common transient visitant on Long Island in April and May (April 3 to May 23 and June 29) returning from the north August 12 to September 17, and last seen October 26 to November 5. It is also found on the Great Lakes and other inland waters as an uncommon migrant. Verdi Burtch reports a specimen from Branchport, Yates co., August 14, 1886, but most of the records for the interior are late in the season, as follows: Onondaga lake, November 30, 1865; Cayuga lake, November 16, 1875; Lansingburg, November 13, 1879; Cornwall-on-the-Hudson, October 10, 1883 and November 4, 1889; Troy, September 21, 1888; Buffalo, October 11, and November 3, 1894; Canandaigua, November 7, 1899; Cayuga lake, September 29, 1905; Buffalo, October 24, 1907; Erie, Pa., October 26–December 14 (Todd). There are only two spring records from the interior, Sing Sing, June 22, 1876 (Fisher); Crane lake, May 17, 1897 (Taylor).

Cormorants are gregarious in habit, and in flight resemble the larger ducks, especially the mergansers. They feed on fish, which they take by diving after them from the surface of the water, or from a low perch. They often alight on large trees near the water, when their peculiar shape and

attitude at once distinguish them from all our other birds. The Double-crested cormorant is a species of eastern North America, breeding from Dakota and New Brunswick northward, and wintering from the 38th parallel to the Gulf of Mexico.

Family PELECANIDAE

Pelicans

Characters. Totipalmate birds of large size and great expanse of wing; bill very long, straight, flattened and grooved, and furnished with a hawk-like hook at the tip; an enormous pouch fitted to the branches of the lower mandible which serves as a net in catching fish; lores and pouch bare; feet very stout; tail short, of many feathers.

Pelicans are mostly confined to warm regions, nesting in large colonies usually on islands, placing the nest on or near the ground. Eggs are from two to five in number. The young are altricial in nature. They are fed on fish brought to them by their parents. In feeding they thrust their bills down the parent's gullet until their whole head is sometimes out of sight. This peculiar habit coupled with the fact that the pelican's pouch and gullet is often bloody from wounds made by the spines of fishes which it has swallowed, undoubtedly gave rise to the legend that the pelican nourishes its young with blood from its own breast. White pelicans fish in companies, driving the fish before them and scooping them up as they come to the surface; but brown pelicans catch their prey by plunging from a hight of 20 feet, or more, as they course back and forth above the water and the resulting splash may be heard for a half mile [Chapman].

Pelecanus erythrorhynchos Gmelin

American White Pelican

Pelecanus erythrorhynchos Gmelin. Syst. Nat. 1788. Ed. 1. 2: 571
A. O. U. Check List. Ed. 2. 1895. No. 125

pelecā'nus, Lat., pelican; *erythrorhyn'chus*, Gr. ἐρυθρός, red, and ῥύγχος beak

Description. *Breeding plumage:* White; primaries black; occipital crest and wing coverts dull yellow; a horny prominence on the bill. *In*

White pelican. Pelecanus erythrorhynchos Gmelin. Cayuga specimen in State Museum.
$\frac{1}{5}$ nat. size

winter: No crest or horn. Bill, pouch, eyelids and feet yellow, nearly red in the breeding season; iris white. *Young:* Brownish on the top of the head, otherwise white.

The White pelican is a rare straggler on the waters of New York State. In colonial days it was more common according to reports, but now, like the cranes and swans, it confines its migrations mostly to the Mississippi valley and western America. Eleven specimens have been recorded from this State:

Saratoga lake, N. Y. Nov. 1788. Munsell, Annals of Albany, 1: 275
Canarsie bay, L. I. L. I. Hist. Soc. Col. Dutcher, Auk, 10: 270
Chautauqua lake, N. Y. About 1860. A. C. Kibbe
Lake Champlain, N. Y. Oct. 15, 1862. F. T. Pember
Cayuga lake, N. Y. Spring 1864. (2). Beal, Am. Nat. 1: 323
Roslyn, L. I. May 11, 1885. S. H. West, Forest and Stream, 24: 328
Cayuga, N. Y. Early fall 1888. (Foster Parker) N. Y. State collection
Geneva, N. Y. May 10, 1892. Seen by Truman R. Taylor
Onondaga lake, N. Y. Fall 1893. W. M. Beauchamp of Baldwinsville, N. Y.
Buffalo, N. Y., Niagara river. Oct. 5, 1894. Savage, Auk, 12: 313

Pelecanus fuscus Linnaeus

Brown Pelican

Pelecanus fuscus Linnaeus. Syst. Nat. Ed. 12. 1766. 1: 215
Pelecanus fuscus DeKay. Zool. N. Y. 1844. pt 2, p. 294, fig. 226
A. O. U. Check List. Ed. 2. 1895. No. 126

fus'cus, Lat., dusky

Description. Upper parts silvery gray, bordered on back and sides with brownish black; primaries black; under parts blackish, streaked with white; crown and breast spots straw-yellow; back of head and neck and spot on the foreneck seal-brown; a white line down each side of the breast; the pouch and feet blackish; eye space blue; eyelids red; iris white; bill mottled. *After the breeding season:* Neck and hind head white, tinged with yellow; young similar, but the plumage much duller.

Length 50–54 inches; extent 78; wing 18.5–21; tail 7; bill 11–12; tarsus 2.5; middle toe and claw 4.5.

The Brown pelican breeds as far north as South Carolina, and rarely straggles up the coast to Massachusetts and Maine; but the only record which can be attributed to this State is a specimen taken off Sandy Hook, and reported by DeKay, in his *Birds of New York*, page 294.

Family **FREGATIDAE**

Man-o'-war Birds

Characters. Steganopodes with long, straight beak hooked at the end; small pouch and feathered lores; tail long, forked, of 12 feathers; feet very small, the middle toe long and pectinate. Frigate-birds have an expanse of wing and power of flight which, in proportion to their size, surpasses all other birds. The common name of this bird is derived from its swiftness of flight and its habit of coursing around other birds and swooping down on them to secure their prey. It is often seen soaring with motionless wings, in the teeth of the gale, or circling almost out of sight in the air above the gathering storm. The speed and ease with which they snatch their prey from the water, or rob the gulls and terns, is often marveled at by natural history writers.

Man-o'-war bird. Frigata aquila (Linnaeus). Gardiner Island specimen. American Museum of Natural History. Much reduced

Fregata aquila (Linnaeus)

Man-o'-war Bird

Pelecanus aquilus Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 133
Fregata aquila A. O. U. Check List. Ed. 2. 1895. No. 128

fregā'ta, Ital., frigate; *ă'quila*, Lat., eagle; probably *aquilus*, dark, swarthy

Description. *Adult male:* Black, glossy above. *Female:* Brownish black, lesser wing coverts grayish brown; breast and upper belly white. *Young:* Similar to female, but with the head and neck white.

Length 40 inches; extent 84–96; wing 23–27; tail 15–19, forked 8 inches, or more; bill 4.5–6; tarsus 1.

This species breeds in the tropics and is common on some of the Florida Keys, sometimes wanders northward and has been captured in Kansas, Ohio and Nova Scotia. Two specimens only have been taken in New York, the first on Faulkner's island, by Captain Brooks, in 1859 [*see* Am. Nat. 9: 470], the second was shot by Mr Joseph P. Miller near the lighthouse of Gardiners island, August 4, 1886, and is now in the American Museum of Natural History.

Order ANSERES

Lamellirostral Swimmers

Order Anseriformes, Sharpe's Hand-List

Bill lamellate, or fitted along the edges with a series of flutings, with a membranous covering, and a nail or dentrum at the tip; feet palmate, the front toes being webbed; hallux, or hind toe, free and elevated; wings of moderate length with 10 functional primaries and a remicle; secondaries about 19, the fifth wanting; legs short, the knees buried in the general body covering, and the tibiae feathered nearly to the joint; position of legs nearer center of body than in grebes and cormorants, but not so central as in gulls and placed far to the side of the broad body, giving them a peculiar waddling gait; neck usually long; plumage soft and dense, especially on the breast, with a copious covering of down; palate desmognathous; sternum long and broad; pelvis large; oil gland tufted; carotids two; ambiens, femorocaudal and its accessory and semitendinosus muscles present; gizzard large and very muscular; tongue large and fleshy, with fully developed glossohyal bone.

This order contests with the order Gallinae the place of greatest economic importance among birds. It comprises all the so called waterfowl, and their general appearance and habits are well known through their familiar

representatives in the park and barnyard. They are ptilopaedic and precocial in nature, i.e. the young are covered with down and follow their mother at once. The nest is placed on the ground, or among the rocks, or in hollow stumps or trees. The eggs are usually numerous, oval in shape and plain in color.

Family ANATIDAE

Ducks, Geese and Swans

The characters of this family are practically the same as those of the order defined above. There are two hundred or more species in the family, found in all parts of the world. They are of great value on account of the food and feathers which they furnish as well as the entertainment they afford the sportsman and nature lover during their yearly migrations.

The family as represented in New York is composed of the Merginae (mergansers), Anatidae (river ducks), Plectropterinae (wood ducks), Fuligulinae (sea ducks), Erismaturinae (stiff-tailed ducks), Anserinae (geese), and Cygninae (swans).

Subfamily MERGINAE

Mergansers

Bill nearly cylindrical with a hooked and overhanging nail; lamellae toothlike, giving them the name of Sawbills; tarsi compressed, scullate in front; hallux lobate; tail rounded, about half as long as wings, of 16 to 18 feathers; head more or less crested; body rather long; gullet capacious.

Mergansers are well adapted to their diving habits and are mostly pisciverous in diet. There are about eight species in the subfamily, inhabiting the holarctic and neotropical realms.

Mergus americanus Cassin

American Merganser

Plate 10

Mergus americanus Cassin. Acad. Nat. Sci. Phila. Proc. 1853. 6: 187
Mergus merganser DeKay. Zool. N. Y. 1844. pt 2, p. 318, fig. 264
Merganser americanus A. O. U. Check List. Ed. 2. 1895. No. 129

mer'gus, Lat., diver

Description. *Male:* Head and upper neck greenish black; lower neck, wing coverts and middle secondaries white, the coverts crossed by a black

bar; lower parts white, tinted with salmon-pink when freshly killed; back and inner scapulars black; outer scapulars white; inner secondaries black and white; rump and tail ashy gray; bill and iris red; legs and feet bright orange. *Female and immature:* Head and upper neck reddish brown, throat whitish; upper parts ashy gray; breast and belly creamy or pinkish white; white patch on secondaries and wing coverts; the female's crest quite conspicuous, but the male's short and stubby. *Downy young:* Upper head and hind neck reddish brown; upper part of body hair brown with four white spots; under parts white; one white and two brown stripes on the lore.

Length, male, 24–27 inches; extent 34–36; wing 10–11.25; tail 5; bill 2–2.25; along gape 3; front of nostril to tip 1.25; rear of nostril to lore feathers .5; tarsus 1.75–2; middle toe and claw 2.75. Female, 1 to 4 inches shorter and other dimensions correspondingly smaller.

Distinguishing marks. Old males of this species and the Red-breasted merganser can be distinguished at some distance by the reddish color of the chest in the latter and its long double crest. Females and young of both species are very similar, but the red-breasted species is smaller, the crest is double, and the feathers on the sides of its mandible extend forward forming a decided angle, while those of the American merganser do not project noticeably. The position of the nostril, however, is the best mark, being nearer the base of the bill in the Red-breasted merganser [*see* dimensions].

This bird called also Goosander, Sheldrake, Sawbill, and Wheezer or Tweezer, is fairly common and well known throughout the State. It is more northerly in distribution during winter than the Red-breasted merganser, but more southerly in summer, its nest having been found near Buffalo, Montezuma, and Little Sodus bay. It formerly bred on many of the Adirondack lakes, but now is disturbed by summer tourists and fishermen to such an extent that it is fast disappearing from the more frequented waters of that region. During the colder months this Merganser is found on the open waters of the State, and often visits the rapid streams on its fishing excursions. In April or early in May the last stragglers have gone north to their breeding grounds and return in October or early November, when the young, or reddish headed birds are almost the only individuals seen.

Like the other mergansers, this species usually splashes on the water with its feet when taking wing, but is a strong flier when fully under way. Young birds, before the wing feathers are grown, will flop and run over the water so swiftly that two men in a canoe will scarcely overtake them, and, even if overtaken, they dive so expertly that it is almost impossible to capture them. The brood remains together on such occasions unless too closely pursued, when they suddenly scatter and collect again after the danger is past. The mother bird is deeply concerned for the welfare of her young and flies ahead whistling and calling to her ducklings with every evidence of distress.

This bird feeds on fish, crayfish and other aquatic animals which it captures by diving, an occupation to which its long, arrowlike shape and broad, strong feet are peculiarly adapted. On one occasion I fired into a flock of Sawbills at close range, bringing down four of the birds, but all of them plunged into the water like so many stones, and only one of them ever so much as gave me a glimpse of himself again.

The nest of this merganser is placed in an old stump, or a hollow tree near the water, and is made of grass and leaves, lined with down. The eggs are from 6 to 11 in number, of a creamy buff color, and measure 2.65 by 1.75 inches.

Mergus serrator Linnaeus

Red-breasted Merganser

Plate 10

Mergus serrator Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 129
DeKay. Zool. N. Y. 1844. pt 2, p. 319, fig. 266
Merganser serrator. A. O. U. Check List. Ed. 2. 1895. No. 130

serrā'tor, Lat., sawyer, referring to the sawbill

Description. *Male:* Head and upper neck dark glossy green; occipital crest long, pointed and double; a white collar nearly surrounds the lower neck; back and inner scapulars black; outer scapulars and mirror white with black; rump and flanks with gray vermiculations; elongated feathers in front of wing black and white; upper breast and sides of lower neck pale chestnut, dashed with blackish; breast and belly white usually tinged with salmon color; sides with wavy grayish vermiculations; bill and iris red;

feet reddish orange. *Female and immature:* Head and neck reddish brown, but paler and duller than in the preceding species and more tinged with cinnamon; back ashy gray; mirror and under parts white. *Downy young:* Upper parts dark hair-brown; spot on each side of rump and rear border of wing yellowish white; cheek and under parts yellowish white; sides of head and neck cinnamon; lores pale with dusky stripe above and one below; lower eyelid grayish white.

Length 20–25 inches; extent 30–34; wing 8.5–9.45; tail 4; tarsus 1.7–1.9; middle toe and claw 2.6; bill 2.2–2.5; gape 2.6–2.75; nostril to tip 1.65; rear of nostril to lore feathers .3. The female the smaller.

The Red-breasted merganser, Sawbill, Indian, or Pied sheldrake, as this species is called, is one of the most abundant ducks along the coast and on the inland waters. It occurs chiefly as a migrant, appearing after the ice has disappeared from our lakes and rivers, and remaining sometimes in large flocks, till late in May when they pass further north to their breeding grounds. A few are known to nest in the Adirondacks, but most of the mergansers of that region belong to the preceding species. The eggs are laid upon the ground in a down-lined nest, carefully concealed in the grass or brushwood. They are 6–12 in number, of a buffy white color, slightly smaller than those of the American merganser.

These mergansers are often observed to hunt in company, a large flock sometimes advancing with wide extended front, driving the fish before them and diving simultaneously so that whichever way their prey may dart there is a serrated beak and capacious gullet ready to receive them. We have often witnessed exhibitions of this habit on the waters of Lake Ontario where these birds are very common during the months of April and May. Occasionally a fish is captured which proves too unwieldy to handle, and, becoming firmly lodged in the merganser's mouth, brings death to its assailant in return for his merciless gluttony.

Mergansers are scarcely fit for food, the flesh being rank and ill-flavored. At the same time they are very wary and hard to kill, so that there is little danger of their extermination, their nesting grounds being on the unfrequented lakes of the boreal zone. Unlike the preceding species this merganser is holarctic in distribution, in America breeding from the Northern States to the arctic regions, and wintering from the Great Lakes to the Gulf of Mexico.

Lophodytes cucullatus (Linnaeus)

Hooded Merganser

Plate 11

Mergus cucullatus Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 129
DeKay. Zool. N. Y. 1844. pt 2, p. 320, fig. 265
Lophodytes cucullatus. A. O. U. Check List. Ed. 2. 1895. No. 131

lophod'ytes, Gr. λόφος, crest, and δύτης, diver; *cucullā'tus*, Lat., hooded

Description. *Male:* A large helmet-shaped crest, white bordered with black; rest of head, neck and upper parts black; sides cinnamon-rufous finely barred with black; a tuft of enlarged feathers on sides of breast in front of the wing with double bars of black and white; speculum white with two black bars; inner secondaries striped along the center with white; breast and belly white; bill black, legs light brown; iris yellow. *Female:* Head, neck and upper parts grayish brown, darker on the back; the head and neck tinged with cinnamon, especially on the crest which is quite conspicuous; throat, breast and belly white; middle wing coverts and secondaries show each a patch of white. *Immature:* Similar, but crest smaller. *Downy young:* Dark hair brown above; spots on each side of back and rump, and rear border of wing grayish white; lower half of head buff, lighter on throat; chest dingy; belly white.

Length 17–18 inches; extent 25–27; wing 7.5–8; tail 4; tarsus 1.1–1.2; middle toe and claw 2.35; bill 1.4–1.5.

Field marks. The wonderful crest of the male is distinctive even at a considerable distance, our only other bird which resembles him even remotely being the Buffle-head. The female may be recognized by the slim mergine bill, cinnamon crest, and small size for a merganser.

The Hooded merganser, Swamp sheldrake, Hairy-head, or Water pheasant is generally distributed in New York State, occurring in many places where the other mergansers are unknown, because of its habit of frequenting swamps and ponds which are too small to attract the other species. It has been known to breed in the counties of Cayuga, Erie, Jefferson, Ontario, Wayne, as well as those of the Catskill and Adirondack regions, and Mr Howell has also found it on Long Island in midsummer, but there seems to be no breeding record for that district. It is rarely found throughout the winter within our borders, but is fairly common as a migrant, arriving from the south late in March and going north in April,

returning in October and November [*see* Occurrence tables]. This is a nearctic species breeding both in our austral and boreal zones and wintering from the Northern States to Cuba and Mexico.

This species inhabits the sluggish, wooded ponds and streams which are also the haunts of the Wood duck and the Heron. Consequently it does less harm by destroying fish than the other mergansers, but lives to a considerable extent on aquatic insects and even partakes at times of vegetable food. Its flesh, as might be expected, is more edible also, and for all these reasons, as well as on account of its beautiful plumage, it is one of the Duck family which might well be encouraged to live and propagate within our borders. It is one of the four species of wild ducks which breed to any extent in the State as a whole, and would do so more extensively if properly protected.

It is a beautiful sight to watch a company of these birds swimming briskly along among the lily pads, all flashing and closing their crests in time to their advance. Sometimes they may be seen perched motionless upon a rock or stump. If disturbed they make off down the stream, pattering the water in a long line of dimples as they dart away. Presently they rise and wheel about and a slight whirring of wings is heard as they shoot past above you like so many winged arrows.

Their nests are built in hollow trees of grasses and moss, lined with down. The eggs are from 7–11, creamy white, 2.12 x 1.75 inches.

Subfamily ANATINAE

River Ducks

Tarsi scutellate in front; hind toe simple, or without lobe. The former character separates River ducks from geese, the latter from Sea ducks. Their bills are also proportionately longer, flatter and more adapted to dabbling in water than those of Sea ducks, reaching a wonderful perfection in the Shoveler. Their feet are also smaller than in Sea ducks, their legs and necks shorter than in geese. The drakes and sometimes the ducks have a tracheal tympanum, or bony drum at the base of the windpipe, a character which is also possessed by the Sea ducks. The drakes are fine plumaged birds, usually with a bright, iridescent mirror, or beauty spot on

the wing, and more or less green on the head, and black about the tail with a whitish patch in front of it. In all our species the drakes show this tendency to a broken color pattern, some abrupt change in coloration being evident about the head, wings, and rear flanks. This may be of use for self-protection as well as rivalry, the apparent discontinuity of outline rendering the bird invisible as he sits motionless on the shore or amongst the grass and sticks.

River ducks feed in water so shallow that they can reach the bottom with their necks or by bobbing, but seldom dive, except in sport or to escape from enemies. The females are sober colored ducks, with mottled plumage, but wings similar to those of the drakes. In summer the drakes pass into the "eclipse plumage" which resembles that of the ducks. During this season they leave the ducks to rear their ducklings alone, and go into seclusion, being incapable of flight, since all the wing feathers are lost at the same time. With the autumnal molt they regain their gay plumage and retain it until the following summer. Unlike the drakes, the ducks molt only once a year. As their name signifies these ducks are more confined to the marshes and inland waters than the next subfamily.

Anas platyrhynchos Linnaeus

(Anas boschas on plate)

Mallard

Plate 12

Anas platyrhynchos Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 125
Anas boschas DeKay. Zool. N. Y. 1844. pt 2, p. 347, fig. 240
A. O. U. Check List. Ed. 2. 1895. No. 132

a'nas, Lat., duck; *platyrhy'nchos*, Gr. πλᾰτύῥῥυγχος, flat beak

Description. *Male adult:* Head and upper neck glossy green; a white ring around the neck just below the green; lower neck and breast purplish chestnut; under parts and scapulars grayish white finely cross marked with dusky undulating lines; back grayish brown; rump, crissum and tail coverts rich black, glossed with greenish; a white patch on sides of rump just in front of the black; central longer tail coverts recurved; tail feathers whitish; bill greenish yellow; feet reddish orange; iris brown. *Female and young:* Head and neck buffy, streaked with fuscous, darkest on the crown and a line on side of head through the eye; upper parts fuscous, the feathers with

crescents and margined with ocherous buffy; under parts ocherous buff, mottled with dusky brown; wings like the males; feet not so bright as males; bill orange-ocher, marbled with dusky. *Male in summer:* Resembles female.

Length 20–25 inches; extent 32–36; wing 10–12; tail 3–4; tarsus 1.5–1.8; middle toe and claw 2.25; bill 2–2.4; weight 2–3 lb.

Hybrids of the Mallard with the Black duck, Pintail, Green-winged teal, and other species are occasionally taken. The Anas maxima or Green-backed mallard of many writers is probably a hybrid between the Mallard and Muscovy duck. It is almost black in general coloration, but shows more or less of the Mallard pattern, and is nearly as large as a goose.

Distribution. The Mallard is rare, or uncommon, on Long Island and in general in the eastern part of the State. Throughout the Great Lake region and the larger marshes of the interior it is fairly common as a transient visitant, but nowhere in the State is as abundant as the Black duck, the Mallard belonging more to the Mississippi valley and western North America, the Black duck to the Atlantic coastal region. It breeds as far south as central New York and northern Missouri and as far north as Greenland and the Arctic ocean, being holarctic in distribution, but is practically absent from Labrador and the New England region. It winters from New York and northern Illinois as far south as Florida, Cuba and Panama, but chiefly in the Gulf States and northern Mexico. In New York the Mallard is occasionally found in winter on Long Island and in western New York. It breeds very rarely in the counties of Cayuga, Livingston, Monroe, Ontario, Orleans, Oswego, Seneca, and perhaps in Washington. It occurs chiefly, however, as a transient, arriving from the south from the 10th to the 20th of March in the southern portions of the State and a week or so later in the northern. They leave for the north about the middle of April, sometimes remaining till the 10th of May, and return from their breeding grounds about the 1st of October and leave for the south about the middle of November. They are commonest in the spring a few days after the marshes are free from ice and in the fall after the first sharp frosts and snow flurries.

The Mallard, Green-head, or common wild duck is well known over nearly the whole northern hemisphere and is the original of the domestic

duck, the ordinary breeds of which resemble the Mallard very closely in color, voice and habits. The Mallard's nest is placed on the ground, usually near some slough or marshy stream, sometimes on a rotten stump or even an old Crow's nest, and is thickly lined with downy feathers. The eggs are from 6 to 10 in number, smooth, of a pale greenish white, or yellowish drab, and measure 2.35 x 1.65 inches. The ducklings are olivaceous above with a pair of yellowish spots behind the wings and another on the sides of the rump; sides of head, a stripe over eyes and under parts yellowish buff.

Anas rubripes (Brewster)

(Anas obscura on plate)

Black Duck

Plate 12

Anas obscura DeKay. Zool. N. Y. 1844. pt 2, p. 344, fig. 241
A. O. U. Check List. Ed. 2. 1895. No. 133
Anas obscura rubrĭpes Brewster. Auk. 1902. 19: 184; cf. Auk. 1908. 25: 362

obscū'ra, Lat., dark, dusky; *rū'bripes*, Lat., red-footed

Description. General color dusky brown, the feathers edged with light rusty brown; the lower parts lighter; throat and sides of the head grayish buff, thickly streaked with blackish; top of head and a streak through the eye dark brown, narrowly streaked with buffy; rump only slightly marked with rusty and its rich dark brown often glossed with velvety greenish, especially in old drakes which have the same greenish gloss on the crown and the sides of the occiput; lining of wings white; bill yellowish green with blackish nail; feet orange-reddish with dusky shading and webs; iris brown; mirror rich violet purple, framed in black, and a thin line of white along tips of secondaries. Old drakes have redder feet, yellower bills, more distinctly spotted throats, and are distinctly larger ("rubripes" of Brewster 1902).

Remarks. Young and light colored Black ducks are often mistaken for Mallard ducks by the inexperienced, but there need be no confusion if the observer will remember that the Mallard always has a broad framing of white both before and behind the mirror, while the Black duck has only the black frame in front of the mirror and only a thin line of white, if any, behind it. The Mallard female also is much lighter or more buffy in color

and has a bill marbled with dusky and yellowish, while the Black duck has a plain olive-green or yellowish green bill.

Length 20–25 inches; extent 32–38; wing 10.5–12; tail 3.5–4.5; tarsus 1.5–1.8; bill 2–2.4; weight 2.7–3.5 pounds.

Distribution. The Black duck is the commonest of all our river ducks and is fairly abundant both on Long Island and in the marshes of western New York during migration season. It breeds in suitable localities, when left undisturbed, in all parts of the State, but is much more common as a summer resident in the northern counties. On the coast of Long Island it is abundant throughout the winter and is common on the central lakes as long as they remain open. On Canandaigua lake even when frozen over for its entire length this duck remains, often in large flocks, sitting on the ice in the middle of the lake and feeding in the open shallows of the outlet at night. The Black duck is commonest, however, from the time the marshes are open till the last of April, when the greater number have passed to their breeding grounds. They return in force in October and are common until late in November when the last which are to pass farther southward have departed. It is an exceedingly wary bird and soon learns to give decoys and "blinds," or "hides," a wide berth, and when disturbed on its feeding grounds will remain all day on the open lake or ocean and return to feed only when darkness has settled. Like the Mallard, the drake of this species has a low reedy quack, while the duck's note is a loud resonant *quack, quack, quack.* When frightened she will shout *quack* slowly and sharply many times in succession.

Like the Mallard the Black, or Dusky duck, feeds on wild rice, buckwheat, weed seeds and nearly all manner of vegetable substances, also devouring snails, frogs and other aquatic animals with a gluttonous greed, especially in the springtime. On the morning of October 26, 1901, I shot a Black duck from a flock of 75 birds, which were returning to Canandaigua lake from a flooded cornfield. From its gullet and gizzard I took 23,704 weed seeds, which together with a few pebbles, snail shells and chaff were the sole contents of its stomach. Of these seeds 13,240 were pigweeds (Chenopodium and Amaranthus), 7264 were knot grass (Polygonum), 2624 were ragweed (Ambrosia), and 576 were dock (Rumex).

This species pairs in March or earlier and begins to lay from April 18 to May 12, concealing its nest very carefully among the grass or brushwood of swamps or waste fields, sometimes a long distance from water. The eggs are from 8 to 12 of a dingy white or yellowish drab color and measure 2.4 x 1.75 inches. The ducklings are olive-brown above with three pairs of buffy spots, one on the wings, one on the sides of the back and one on the sides of the rump; sides of the head and neck, and under parts dingy white tinged with buff; sides of the head with a narrow dusky streak through the eye, and a dusky ear patch.

The larger form of Black duck which is common in New York late in the fall and throughout the winter was described by Mr Brewster as a distinct subspecies in 1902, but is now considered untenable. The name rubripes, however is found to be the only tenable name for the species.

Chaulelasmus streperus (Linnaeus)

Gadwall

Plate 12

Anas strepera Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 125
DeKay. Zool. N. Y. 1844. pt 2, p. 343, fig. 243
A. O. U. Check List. Ed. 2. 1895. No. 135

chaulelas'mus, Gr. χαύλιος, protuberant, and ἐλασμός, plate, referring to the strainers; *stre'perus*, Lat., noisy

Description. *Male:* Head and neck grayish brown or buffy barred and speckled with black; lower neck, breast, back and sides marked with half rings and wavy bars of black and white, sometimes quite dark on lower neck; rump, tail coverts and crissum, black; belly white marked with gray; middle wing coverts chestnut-red; longer coverts velvety black at their ends next to the mirror; speculum white; feet dull yellowish with dusky webs; bill bluish black; lamella fine, numerous, 30 of them protrusive; iris reddish brown. *Female and young:* Head, neck and upper parts varied with dusky and grayish white or pale and ocherous buff in pattern similar to Mallard duck; belly grayish white speckled with dusky; mirror white; bill dusky, marbled with dull orange; feet dusky yellowish; lining of wings white as in Mallard and Black duck.

Length, *male*, 20–22 inches; *female*, 18; extent 34; wing 10–11; tail 4.5; tarsus 1.6; middle toe and claw 2.2; bill 1.6–1.75.

Distinguishing marks. This species differs from all our other river ducks in having a pure white speculum. The female is often confused with the Pintail and Baldpate ducks by ordinary gunners, these species being known as Gray ducks in western New York; but by giving slight attention to the figures on plates 12 and 13 it will be easy to distinguish the difference.

The Gadwall, or Gray duck, though not common in any part of New York State, is frequently taken on the marshes of Oswego, Cayuga, Seneca, Wayne and Monroe counties, but on Long Island is considered only an accidental visitant. Dutcher records only four specimens from Long Island. Giraud obtained a few along the south shore of Long Island. Mearns found it a transient visitant along the Hudson, Merriam in the Adirondack region, and Ralph and Bagg on Oneida lake. Mr Savage calls it an accidental visitant near Buffalo and Mr Higgins near Cincinnatus. On the Montezuma marshes a very few of these ducks are seen each season, where the drake figured by Mr Fuertes in plate 12 was taken on November 20th, 1905, by Mr Foster Parker, who states that it is less common than the Shoveler. He once saw a gunner with about 20 which he had killed in "the Ponds." On two occasions I have seen this duck on Canandaigua lake, but from my records it is evident that the Shoveler outnumbers the Gadwall about 10 to 1. New York records of this species show that it occurs from March 30th (Cincinnatus) till late in April and from early October until November 24th (Gilgo, L. I.).

Audubon records on the authority of Dr Boardman that in 1812 a flock of 30 tame gadwalls was seen in Dutchess county, N. Y., which had been reared by a pair captured in a neighboring mill pond. Wilson obtained the original of his plate 71 near Seneca Falls, N. Y. DeKay stated that this species breeds in the interior of the State, but I have been unable to find any evidence of its nesting nearer than St Clair Flats and Anticosti Island. Like the Mallard the Gadwall is holarctic in distribution, in America breeding from Kansas and Colorado north to Lesser Slave Lake and Ft Churchill.

This duck has long, pointed wings, and a rather "long geared" appearance when flying. Its quack is often repeated when it is on the wing, and is somewhat shriller than the Mallard's.

Mareca penelope (Linnaeus)

European Widgeon

Plate 13

Anas penelope Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 126
DeKay. Zool. N. Y. 1844. pt 2, p. 346
A. O. U. Check List. Ed. 2. 1895. No. 136

marē'ca, Brazilian name of teal; *penĕ'lope*, Gr. and Lat., wife of Ulysses; perhaps should be from *penelops*, Pliny's name for a kind of duck

Description. *Male: Crown creamy buff;* throat black; rest of *head and neck cinnamon-red* mostly without green or spots; rest of plumage very similar to Mareca americana. *Female and young:* Head and neck strongly tinged with cinnamon, otherwise like americana [*see* pl. 13].

The Widgeon, or English widgeon as sportsmen call it, is probably not so rare as has been supposed in eastern North America. There are several definite records for New York State, as follows:

Long Island. (Found in Fulton Market). Dec. 3, 1842. Giraud, Birds of L. I., p. 308–10; *see also*, Lawrence, N. O. C. Bul. 14: 190; Forest and Stream, 5: 339
Southampton, L. I. (Fulton Market). Jan. 6, 1873. N. T. Lawrence, N. O. C. Bul. 3: 98; *see also*, Forest and Stream, 10: 235
Cayuga lake, N. Y. May 1880. Fowler, Wright & Rathbun, O. & O. 7: 133
" Spring 1882. ♂. (David Copeman). F. S. Wright
Long Island. Winter 1899. Sanford, Bishop & Van Dyke. (Reference lost)
Gardiners island, L. I. Nov. 27, 1901. N. T. Lawrence, Auk, 19: 196
" Feb. 5, 1902. Braislin, Auk, 21: 288
Cayuga marshes, N. Y. Several taken. Foster Parker
Long Island. "Apparently breeding." Brewer, Bost. Soc. Nat. Hist. Proc. 1858. 6: 419

Although we have been unable to find definite dates for specimens taken on the Montezuma marshes, it is certain that several of this species have been killed there by duck hunters during the last 20 years. The testimony of my friend Mr Foster Parker, who saw these birds in the flesh, I regard as conclusive. If sportsmen will keep a sharp lookout for this duck and report all instances of its occurrence, I believe we shall find it almost as common as the Gadwall in New York.

Mareca americana (Gmelin)

Baldpate or American Widgeon

Plate 13

Anas americana Gmelin. Syst. Nat. 1788. 1: 526
DeKay. Zool. N. Y. 1844. pt 2, p. 345, fig. 248
A. O. U. Check List. Ed. 2. 1895. No. 137

americā'na, American

Description. *Male:* Head and neck grayish white, often tinged with buffy, thickly speckled with black; the top of the head white; broad patch on sides of head behind the eyes nearly solid shiny green; forebreast and sides vinaceous; lower hind neck, back and scapulars finely waved with vinaceous or grayish white and dusky; vinaceous of sides also waved somewhat with dusky; lower breast and belly pure white; middle upper tail coverts gray and white; outer upper tail coverts, under coverts and sides of rump black; middle pair of tail feathers elongated three fourths of an inch, pointed and black; lesser wing coverts gray, middle longer coverts white—pure white in high plumage and grayish in young birds; mirror rich green turning to velvety black behind and margined with black in front; a broad pearl-gray secondary on the inner margin of the mirror, followed on the inside by four elongated secondaries which are velvety black on the outer web narrowly margined with white and penciled with white along the shafts; bill grayish blue with black tip and narrow base; feet dull bluish. *Female and young:* Head and neck dingy white speckled with dusky but without the white crown and green patch; lower breast and belly white; upper breast and sides reddish brown obscurely barred with dusky brown and the feathers tipped with grayish white; upper parts dusky brown with broken bars of rufous or buffy brown and the feathers tipped with paler; bill and feet similar to male's but duller.

Length 18–21 inches; extent 30–35; wing 9.5–10.5; tail 3.5–4.5; tarsus 1.5; middle toe and claw 2.2; bill 1.35–1.53.

Distribution and migration. The Baldpate, or American widgeon, is a fairly common migrant on the shores of Long Island and the marshes and lakes of western New York. On the Montezuma marshes, Canandaigua lake, and the bays of Lake Ontario it seems to be more common in the spring than in the fall, occurring in considerable numbers from the time when the ice goes out in March till the middle of April, a few sometimes remaining till the third week in May. It arrives at the same time as, or a few

days later than, the Pintail and is about as common as that species. It returns from the breeding grounds, which lie mostly from Minnesota to the Mackenzie valley and Alaska, the 15th of September to 10th of October, and leaves from the 10th to the 20th of November for its winter quarters, which lie from Chesapeake bay to Florida and Cuba and Mexico. Stragglers are sometimes found with us as late as December 13th.

The Baldpate or American widgeon, like the Black duck often spends the day on the open waters of our lakes and bays, especially when disturbed in the marshes, and at dusk resorts to the shallows and flooded lands to feed on the seeds of aquatic plants, tender vegetable shoots, snails and insects. The male's note is a mewing whistle resembling the syllables *whew, whew*. The female utters a loud cry like the syllables *kaow, kaow*. Its flesh is highly esteemed as food.

Nettion crecca (Linnaeus)

European Teal

Anas crecca Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 126
A. O. U. Check List. Ed 2. 1895. No. (138)

net'tion, Gr. diminutive, νήττιον, a duckling; *crec'ca*, Lat., referring to the voice, or quack

Distinguishing marks. Similar to the Green-winged teal, but no white crescent in front of the wing; long scapulars and inner secondaries, creamy white, forming a conspicuous broad *white streak;* the dusky barring of the sides and upper parts coarser.

Females and young of this teal can scarcely be determined unless by careful comparison with authentic specimens, but seem to be browner and less finely variegated than the American bird.

This palearctic species occurs in Greenland and casually along the Atlantic coast of America. J. G. Bell reported several specimens from Long Island and the vicinity of New York taken in 1858 and earlier [*see* Coues, Key to North American Birds, 2: 918]. Mr Foster Parker reports

European teal. Nettion crecca (Linnaeus). From Hudson's *British Birds*. ⅓ nat. size

one taken in the Montezuma marshes April 10, 1902. Two males from Merrick, L. I. taken about December 17, 1900, reported by Braislin [*Auk*, 19: 145].

Nettion carolinensis (Gmelin)

Green-winged Teal

Plate 13

Anas carolinensis Gmelin. Syst. Nat. 1788. 1: 533
DeKay. Zool. N. Y. 1844. pt 2, p. 340, fig. 249
A. O. U. Check List. Ed. 2. 1895. No. 139

carolinen'sis, of Carolina

Description. *Male:* Head slightly crested, rich chestnut-brown, with black chin and a large patch of glossy green extending backward from the eye to the end of the crest where it meets its fellow, tawny black on its lower border and margined with a thin white line, more or less distinct; a

white crescent in front of wing; upper parts and flanks finely waved with black bars on a grayish white surface; under parts whitish, buffy on breast and clouded with gray and marked with round white spots; outer scapulars and tail coverts, and crissum black, a buffy patch on each side; wing coverts brownish gray; mirror bright green, velvety black on outer parts, bordered with ocherous buff on the front and with white on the rear; bill black; feet bluish gray; iris brown. *Female and young:* No crest; head and neck brown streaked with reddish brown; throat and foreneck grayish; upper parts varied with dark brown, tawny and grayish; whitish or grayish below, tinged with buffy on breast and spotted with dusky; wings similar to male.

Length 13–15 inches; extent 22–24; wing 7–7.6; tail 3; bill 1.5; tarsus 1.2.

Distribution and migration. This species is uncommon along the seacoast of New York State, but is common along the Hudson river and the lakes and marshes of the interior of the State. It occurs almost entirely as a migrant, appearing soon after the Mallard and Pintail in March and leaving about the middle of April for its breeding grounds in the north. It returns from the 5th to the 20th of September and the greater number depart for the south from October 20th to November 10th, being abundant in the southwestern states and Mexico throughout the winter. Occasionally, however, it is found both on Long Island and in western New York in winter. Mr Ottomar Reinecke reports a case of its breeding on Strawberry island, Niagara river, and Foster Parker one case on the Montezuma marshes, while wing tipped birds have undoubtedly bred in other localities. The breeding range, according to Cooke, extends from New Brunswick to northern Illinois and Oregon and southward in the Rocky mountain region to New Mexico and north to the edge of the barren ground on Hudson bay and Kotzebue sound, the "main breeding grounds being in west central Canada from Manitoba to Athabasca."

The Green-wing is a noisier bird than the Blue-winged teal, the male uttering a short mellow whistle and the duck a quack after the fashion of a Black duck but small, high-pitched and more often repeated. It feeds chiefly at night on aquatic plants, snails, insects and crustaceans. Its nest is placed on the ground near the border of the stream or marsh. The eggs are from 8 to 12 of a pale greenish buff color, about 1.85 x 1.25 inches.

Querquedula discors (Linnaeus)

Blue-winged Teal

Plate 14

Anas discors Linnaeus. Syst. Nat. Ed. 12. 1766. 1: 205
DeKay. Zool. N. Y. 1844. pt 2, p. 339, fig. 246
A. O. U. Check List. Ed. 2. 1895. No. 140

querque'dula, Lat., a kind of small duck; *dis'cors*, Lat., discordant

Description. *Adult male:* Head dark leaden gray with purplish reflections changing to blackish on the crown, chin, and base of bill; a large crescentric patch of white in front of eye; under parts cinnamon, rufous or purplish gray, thickly spotted with black and barred on the flanks; upper parts varied with dusky and yellowish brown, and turning to greenish brown on rump; a white spot on each side of base of tail; crissum black; bill dusky; feet dull yellow; iris brown; wing coverts grayish blue, the longer ones tipped with white; mirror green. *Female and young:* Wings similar to the males but less white on the forward border of the mirror, and colors less bright; head and neck grayish buff with streaks and spots of dusky buff, except on throat; crown quite dusky; belly whitish gray with obscure markings. *Drakes in eclipse plumage:* Resemble the ducks.

Length 14.5–16.5 inches; extent 26–31; wing 7–7.5; tail 3.5; bill 1.5; tarsus 1.2.

Field marks. The females and young of this species are frequently confused with Shoveler ducks when seen at a distance, but the peculiar bill of the latter species will serve to distinguish it from the teal. The blue wing coverts are characteristic of both species.

The Blue-winged teal is one of our commonest river ducks, being fairly well distributed throughout the State in all extensive marsh lands, but is more common in the lake region of western New York than on Long Island and is decidedly more abundant in the fall than in the spring in all parts of the State. It breeds rarely on Long Island, or did in former years, but more commonly in the marshes of Cayuga, Seneca, Wayne and Oswego counties as well as many other localities in the region of the lakes.

The Blue-winged teal, or Summer teal, as it is sometimes called, makes its earliest appearance with us from the 5th to the 10th of April and passes on to the north, or begins to breed, about the 10th of May. Like many

other ducks it is very secretive during the breeding season and I have known many instances in which broods were reared near farmhouses without their presence being suspected until the young were able to fly. Early in September this species is quite common on the ducking grounds of western New York and sportsmen often make large bags at the opening of the shooting season in the Montezuma marshes, and the ponds and bays along the shores of Lake Ontario. The flight of the teal is rapid, often equaling 2 miles per minute. Upon alighting they drop suddenly into the marsh like a snipe. Flocks of teal travel in a densely massed company and are sometimes seen wheeling about over their feeding grounds at dusk or daybreak like a flock of sandpipers. The Blue-wing's note is a whistling "peep" repeated five or six times but is seldom heard. The duck quacks less plainly and in hoarser voice than the Green-wing. They usually depart for the south by the 20th of October but are sometimes taken on Long Island as late as November 15th or even the 12th of December.

The nest of the teal is carefully concealed on the edges of the marsh and thickly lined with down. The eggs are from 7 to 12 in number, of a creamy buff color and measure 1.85 x 1.3 inches.

Querquedula cyanoptera (Vieillot)

Cinnamon Teal

Anas cyanoptera Vieillot. Nouv. Dict. d'Hist. Nat. 1816. 5: 104
A. O. U. Check List. Ed. 2. 1895. No. 141

cyanop'tera, Gr. κυανός, blue, and πτερόν, wing

Distinguishing marks. *Male:* Head, neck and under parts purplish chestnut, very dark on crown, chin and crissum, dusky on belly; foreback buffy brown varied with dark brown crescents and bars; rump greenish brown; wings similar to the preceding species. Size the same as the Blue-wing, or slightly longer, and the bill longer. *Female:* Very similar to female discors, but bill .25 inches longer and under parts tinged with chestnut, head and chin more speckled.

This is the neotropical representative of the Blue-winged teal, which is nearctic in distribution, but like many forms of South American origin has invaded the southwestern United States and occasionally appears along the Gulf coast. This teal is common west of the Rocky mountains but is purely accidental in the Eastern States. A male of this species in fine plumage was killed on the shore of Seneca lake, Yates co., N. Y., about the middle of April 1886, and is now in the collection of Mr James Flahive, Penn Yan, N. Y.

Cinnamon teal. Querquedula cyanoptera (Vieillot). New York specimen, James Flahive collection. ¼ nat. size

Spatula clypeata (Linnaeus)

Shoveler

Plate 14

Anas clypeata Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 124
DeKay. Zool. N. Y. 1844. pt 2, p. 342, fig. 245
Spatula clypeata A. O. U. Check List. Ed. 2. 1895. No. 142

spa'tula, Lat., a broad piece, a spoon; *clypeā'ta*, Lat., *clypeum*, a shield; both names referring to the shape of the bill

Description. Bill long and greatly expanded at the end, with numerous fine and prominent lamellae. *Adult male:* Head and neck dark shiny green; lower neck, forebreast, scapulars and patch on each side of base of tail, white; back brownish black; inner secondaries, rump, upper and under tail coverts greenish black; belly reddish chestnut; wing coverts grayish blue; mirror rich green, bordered in front by white and on sides by black; bill blackish; feet orange red; iris yellow. *Female:* Plumage varied with brownish yellow and dusky, in pattern like the female Blue-winged teal; wings similar to drake's, but not so bright; feet orange; bill greenish brown on top sparsely speckled with dusky ochery orange at base and below.

Young and eclipse drakes: Found in all stages from that resembling the female to that of the high plumage figured by Mr Fuertes in plate 14.

Length 17–21 inches; extent 30–34; wing 9–10; tail 3; bill 2.65–2.75; tarsus 1.3–1.36.

The Shoveler, Spoon-bill, or Spoon-bill teal, is rare on Long Island, and in eastern New York, but fairly common as a migrant in western New York, arriving from the south from the 15th of March to the 5th of April and passing north from the 20th of April to the 12th of May. It has been taken on Long Island as early as February 12th and may pass the winter rarely in the southern part of the State. In the fall it arrives from the north the 15th of September to the 30th and leaves for the south October 15th to November 10th. In habits the Shoveler resembles the Pintail, preferring the marshes, shallows and flooded lands, feeding on the seeds of aquatic plants, snails and insects. Its cry, according to some, resembles the syllables *took*, *took*, or may be compared to the sound of a rattle turned by short jerks. This species is holarctic in range, but does not usually breed nearer to us than the St Clair flats and is most common in the interior of America along the Mississippi valley, nesting principally from Iowa, Colorado and northern California northward to central British Columbia and the Saskatchewan, and rarely to Ft Anderson and Kotzebue sound. Several years ago a Shoveler reared her brood on the Montezuma marshes, near the residence of Mr Foster Parker, who saw the old bird come from the nest and occasionally saw her with her brood until they were grown. This is the first definite breeding record for the State. The Shoveler is common in the West during migration and winters from Maryland and Missouri southward to Panama.

Dafila acuta (Linnaeus)

Pintail

Plate 15

Anas acuta Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 126
DeKay. Zool. N. Y. 1844. pt 2, p. 341, fig. 244
Dafila acuta A. O. U. Check List. Ed. 2. 1895. No. 143

da'fila, no meaning known; *acū'ta*, Lat., sharp, acute, referring to the tail

Description. *Male:* Head and upper neck rich brown turning to black on the nape and glossed with green and reddish bronze on the sides of the

back head; front and sides of lower neck, breast and belly buffy white, a narrow line of the same color running up the sides of the neck between the bronzy brown of the sides of the head and the back of the nape; upper parts in general and flanks waved with grayish white and dusky; longer scapulars black, edged with buffy; upper and under tail coverts black, the upper broadly edged on the inner side with grayish or buffy white; a white patch on sides of rump; tail feathers gray, except the longer central pair which are black, glossed with darker green; wing coverts plain brownish gray; mirror bronzed green, bordered in front by rufous, behind by blackish and buffy white, inside by black and buffy; bill blackish edged with grayish blue; feet grayish blue; eyes brown. *Female and young:* Head and neck dingy white, often tinged with rusty, especially on the top and sides of the head, thickly speckled or streaked with dusky; upper parts brownish black, the feathers with grayish white or buffy or ocherous edgings and broken bars and loops; under parts dingy white or ochery white, mottled more or less with dusky; mirror shows the pattern of the males, but is often only sprinkled with gray as the rufous anterior margin is usually replaced with buffy white.

Length, *male*, 26–30 inches; *female*, 20–24; extent 33–36; wing 9.8–11; tail, *male*, 5–9; *female*, 3.8–5; bill 1.85–2.25; tarsus 1.55–1.68; middle toe and claw 2.25.

Distribution and migration. The Pintail is a fairly common migrant in the coastal region and more common in the marshes of western New York. As a spring migrant it ranks among the River ducks next to the Black duck in abundance, at least in Monroe and Ontario counties, being slightly more numerous than the Baldpate and like that species is apparently commoner in the spring than in the autumn. On Long Island it arrives from February 15th to March 6th and passes northward from March 24th to April 15th, returning from August 25th to September 20th and passing south from the 19th to the 30th of November. In western New York its arrival is from one to three weeks later, but it is sure to make its appearance as soon as the marshes are free from ice and is sometimes observed as late as the middle of May. In the fall it appears mostly in small flocks or as single individuals from the middle to the last of September, and is last seen from the 25th of October to the 15th of November. It has been found accidentally on Long Island in winter, but spends the cold season mostly from New Jersey, southern Illinois and British Columbia, as far south as

Mexico and Costa Rica. Its breeding grounds extend from North Dakota to the Arctic ocean.

Like the Mallard and Baldpate it comes into the shallow waters at dusk to feed on aquatic weeds, insects and crustaceans. Its note is seldom heard by day but while coming into the feeding grounds at night with the widgeons, black ducks and mallards, the hoarse muffled quack of the duck and the mellow whistle of the drake are heard mingled with whistling of the Widgeon and the loud calls of the Black duck. In the springtime the drakes often give utterance to low soft notes which seem to flow from deep down in the throat, especially while performing curious courting antics in the presence of the ducks.

Aix sponsa (Linnaeus)

Wood Duck

Plate 14

Anas sponsa Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 128
DeKay. Zool. N. Y. 1844. pt 2, p. 338, fig. 247
Aix sponsa A. O. U. Check List. Ed. 2. 1895. No. 144

aix, Gr. αἴξ, some kind of waterfowl; *spon'sa*, Lat., a bride

Description. *Adult male:* Head with a beautiful flowing crest; upper parts resplendent with rich green and purple and bronze and velvety greenish black; breast purplish chestnut with chains of pointed white spots; a patch of dark purplish flowing feathers also on each side of the base of the tail; a narrow white line from the base of the bill passing over the eye and down the sides of the crest, another white line from behind eye passing down the lower edge of the crest; throat white, sending a spur upward on the side of the head and another on the side of the neck; a large white crescent edged with black in front of the wing; sides yellowish gray finely waved with black and white vermiculations, the longer flank feathers tipped with concentric arcs of black and white; speculum changing between purplish green and steel blue, bordered with white on the tips of the secondaries; primaries white frosted; lining of wings white barred with brownish gray; belly white; bill pinkish white, the base lake-red, the tip and ridge and lower mandible black; iris and eyelids red; feet yellowish or orange, with dusky webs. *Female:* Crest slight; bill largely dusky; feet dusky yellowish; head and neck gray, the chin and feathers about the base of bill and spot about eye running back to the ear region white; breast and sides yellowish brown, mottled or streaked with dusky; upper parts much duller than male and

rather brownish; belly white. *Young and males in eclipse:* Resemble the females but the white markings about the eye and base of the bill continue to distinguish the latter.

Length 18–20 inches; extent 27–30; wing 8.5–9.6; tail 4.3–4.75; bill 1.35–1.45; tarsus 1.4; middle toe and claw 2.

Distribution. The Wood duck or Summer duck was formerly a common summer resident throughout the State, and undoubtedly bred in every county. At the present time it is only fairly common in the most favorable localities, such as the marshes bordering on Seneca river and the eastern and southern shores of Lake Ontario. There are still sufficient birds that visit the State each season to propagate and replenish the depleted coverts of this beautiful species, wherever they are left undisturbed from the time of their arrival to the end of the breeding season. But constant persecution during the spring and summer had nearly brought them to the verge of extermination when the law prohibiting spring shooting was passed in 1902. Now in western New York, at least, the Wood duck is holding its own in spite of the tremendous slaughter which initiates the shooting each fall, and we believe the species will be preserved if the spring shooting is abolished in the eastern states, and the law strictly enforced throughout the close season.

Migration. The Wood duck arrives from the south March 15th to the first of April and remains in our State throughout the summer, but is more common and more generally distributed during the early part of April, and in the fall during September, than it is through the summer months, indicating that a considerable portion of the birds which are observed here are summer residents of more northern districts. The author found this bird common on the cranberry marshes of Lake Restoul and neighboring waters in Parry sound district, Canada, but rare on the Adirondack lakes, indicating as it seemed to him that this bird prefers a home which is undisturbed and can not survive the destruction which almost inevitably follows in the wake of thoughtless summer tourists and fishermen. In the fall it leaves us late in October or November and occasionally is taken as late as the middle of December.

The Wood duck prefers wooded swamps and flooded lands which border on lakes and streams, being rarely seen on the open waters of our large lakes and rivers. It is as much at home in the woods as a Grouse and finds its way among the trees with perfect ease when flying at full speed, and is frequently seen perched on trees and stumps. In the fall it frequently visits wooded hillsides in search of acorns of which it is very fond. Its food is principally the seeds of aquatic plants, especially wild rice, and insects which abound in swamps. The call of the drake is a mellow *peet, peet;* but when frightened it utters a harsher note which is usually written *'hoo eek, 'hoo eek*. The note of the duck, when startled, is a sharp *cr-r-ē-ēk, cr-r-ē-ēk, cr-r-ē-ēk*, somewhat like the drake's alarm note. The nest is placed in a hollow tree or stump, its entrance often being so small that one would hardly believe that the bird could enter it. The eggs are from 8 to 16 in number of a yellowish white color and average 2.05 x 1.5 inches in size. Nests containing as many as 23 eggs are sometimes found, probably the laying of two ducks. The young climb to the entrance of the hole and tumble into the water if the nest is near its surface, if far from the water and high up, they are carried down by the female in her bill and led to the water. They are dark brown in color, a whitish bar along the back of the wing, a roundish spot on each side of the rump; a stripe over the eye and sides of the head yellowish buff with a band of blackish brown from the eye to the back of the head; under parts whitish, browner on the sides, the flanks with a whitish bar. Incubation continues for four weeks.

The Wood duck is easily domesticated and bred in captivity. There is no doubt that this species will some day be successfully propagated by the State and liberated as trout and oysters have been.

Subfamily FULIGULINAE

Sea and Bay Ducks

Tarsus scullate in front; hind toe lobed. In this group there is a tendency to shorter bill, deeper at the base, than in the River ducks. The feet are larger, and the legs shorter and placed farther back, and usually

less brilliant in color. Their plumage is very dense and less inclined to bright colors in the drakes, or mottling in the ducks; but a pied pattern in light and dark areas is more prevalent. The Sea ducks in general live more upon the open waters of the ocean, bays, lakes and rivers than do the *Anatinae.* They are expert divers and often obtain their food in water upward of 75 to 150 feet in depth. Their diet consists normally of mollusks and other aquatic animals more than of vegetable substances, but the scaups and pochards often feed on water plants, and their flesh is well tasted, but that of most of the subfamily is coarse and unpalatable. The Sea ducks are highly gregarious in habit and often flock by hundreds or thousands over their favorite feeding grounds. The subfamily consists of 50 or more species, largely holarctic in range, but on the whole, more boreal and arctic than the River ducks.

Netta rufina (Pallas)

Rufous-crested Duck

Anas rufina Pallas. It. 1773. 2: 713
Netta rufina A. O. U. Check List. Ed. 2. 1895. No. (145)

net'ta, Gr. νῆττα, a duck; *rufī'na*, Lat., reddish

This Old World species has somewhat the appearance of the Red-head, but is fully crested and the bill and feet bright colored vermilion and orange-red, the female being duller colored and less crested. The only specimen from North America, a young male, was found in Fulton Market in February 1872, and was supposed to have been killed on Long Island [*see* Ridgway, U. S. Nat. Mus. Bul. 21. 1881. p. 85; Allen, N. O. C. Bul. 6:173].

Marila americana (Eyton)

(Aythya americana on plate)

Redhead

Plate 16

Fuligula americana Eyton. Monogr. Anat. 1838. p. 155
Fuligula erythrocephala DeKay. Zool. N. Y. 1844. pt 2, p. 322
Aythya americana A. O. U. Check List. Ed. 2. 1895. No. 146

marī'la, derivation uncertain, perhaps Gr. μαρίλη, charcoal, from the black head and fore-parts; *americā'na*, American

Description. *Male:* Head and upper neck brick-red; colors of body like the Canvasback but *darker*, not so white above nor so pure white

on belly, black on neck running up much higher; bill bright slaty blue with black tip; feet dull bluish; iris orange yellow. *Female and young:* Like female Canvasback in color but shape of head and bill like male. Size of the smaller dimensions given.

Length 20–22.5 inches; extent 34; wing 9–10; tail 3; tarsus 1.5; middle toe and claw 2.8; bill, length 1.9–2, hight at base .9, width .87; weight 2–3 pounds.

Distribution and migration. Fifteen years ago this species was a common migrant on the Great Lakes, the central lakes and the Hudson river, as well as the waters of the Long Island coast. It is, however, somewhat irregular in manner of occurrence, some years being abundant on the Long Island coast as well as the inland waters, and in other seasons is uncommon or altogether absent. It frequently remains throughout the winter in considerable numbers on Long Island waters and less commonly on the Great Lakes. The principal breeding range of this species is from North Dakota and Manitoba northwestward through the Saskatchewan region, but it has bred as far east as the St Clair flats. Its chief winter range is from Chesapeake bay along the Atlantic and Gulf coasts to Texas. This is the American representative of the Pochard. It is a fine duck for the table when in good condition and after feeding on wild celery for some time it is not second even to the Canvasback. In the spring and less commonly in the fall, the male utters a peculiar *quä-quäq*, at the same time throwing his head far backward toward his tail. The female quacks like a hoarse or half choked Black duck.

Marila vallisneria (Wilson)

(Aythya vallisneria on plate)

Canvasback

Plate 16

Anas vallisneria Wilson. Am. Orn. 1814. 8: 103
Fuligula vallisneria DeKay. Zool. N. Y. 1844. pt 2, p. 321, fig. 256
Aythya vallisneria A. O. U. Check List. Ed. 2. 1895. No. 147

vallisnē'ria, "wild celery," the favorite food of this duck

Description. *Male:* Head and neck reddish chestnut; the crown, foreface and chin strongly tinged with sooty; lower neck and foreparts of

body black; back, scapulars, wing coverts and under parts grayish white lightly marked with fine black vermiculations, excepting belly which is mostly plain; rump, tail coverts and tail blackish; wing feathers grayish, the secondaries pearly gray; bill blackish; feet grayish blue; iris red. *Female:* Upper parts grayish brown, showing traces of gray and black wavings; sides of head and neck tinged with rusty or reddish brown; throat and foreneck mostly plain grayish. *Young* like female.

Length 20–24 inches; extent 34–36; wing 9; tail 3; tarsus 1.6–1.75; middle toe and claw 3; bill, length 2.25–2.5, depth at base 1.12; weight 2–3 pounds.

Remarks. There is no excuse for confusing the Canvasback with the Redhead as will be seen by reference to plate 16. The Canvasback drake is much lighter in color of the body, the neck is a darker red and the face smoky. He is also of longer build than the Redhead. The females and young of the two species are more similar in coloration, and the best mark is the profile of the bill and forehead, which rises gradually from the nostril to the crown of the head in the Canvasback, but shows a decided "break" at the feather-line in the Redhead.

Throughout the Hudson-Champlain valley and the coastal region of New York the Canvasback is a rare migrant and is not a common duck in any portion of the State. Occasionally, however, it has visited the central lakes, especially Canandaigua, Keuka, Cayuga, and Seneca, in large numbers. The winters of 1897–98 and the three following winters were remarkable for the large flocks of canvasbacks which appeared about the 1st of December on these waters and remained until early in March. On Canandaigua lake a flock of nearly 1000 canvasbacks passed a large part of the winter, and on Keuka lake flocks of 200 birds were frequently seen. In February 1899 many of these ducks were killed on Canandaigua lake about the air holes which remained open. Most of those killed were in poor flesh and some were picked up on the ice in a starving condition. During the past few years there have been fewer canvasbacks in winter, but they occur in limited numbers as regular migrants from the 1st to the 20th of April and from October 20th to November 15th. On Long Island Mr Dutcher's Notes show it to be a rare migrant from February 14th to April 6th and from October 12th to December 11th.

This is distinctively a nearctic species and is probably the most famous of all wild fowl for the excellence of its flesh. Its flavor is certainly delicious when it has fed for some time on the Vallisneria or wild celery, and is properly prepared for the table. Many epicures prefer it roasted for half an hour in a hot oven so that the body juices flow freely after the knife, some however like it stuffed and roasted for two hours till thoroughly cooked and browned. Almost any one of our river ducks under ordinary conditions is equal to the Canvasback when it has not fed on its favorite food, and I have usually found the redheads from western New York fully equal to the canvasbacks taken in the same region. The female Canvasback can quack almost as well as a Black duck, and also gives voice to a screaming *curr-row* when startled. The males, when together, frequently utter a peeping or growling note.

The Canvasback breeds from North Dakota and Minnesota northward to Great Slave lake and Fort Yukon, and winters from the Great Lake region and Chesapeake bay to Illinois, Texas and Mexico.

Marila marila (Linnaeus)

(Aythya marila on plate)

Scaup Duck

Plate 17

Anas marila Linnaeus. Syst. Nat. Ed. 12. 1766. 1: 196
Fuligula marila DeKay. Zool. N. Y. 1844. pt 2, p. 323, fig. 252
Aythya marila nearctica. A. O. U. Check List. Ed. 2. 1895. No. 148

Description. *Male:* Head, neck and foreparts of body black, the head and upper neck glossed with greenish with only a slight suspicion of purplish; back, scapulars and wing coverts and lower belly waved with white and blackish; rump and tail coverts black; belly white, waved with dusky white in the region of the vent; the long flank feathers also lightly waved with dusky white; mirror white bordered with blackish; bill slaty blue with black nail; feet leaden bluish; iris yellow. *Female and young:* Feathers around base of bill white; upper parts ranging from umber brown on head and neck to fuscous brown on the back, the foreparts more or less margined with ocherous, and wavy bars of white usually showing slightly on the scapulars and other parts so marked in the male; speculum white; belly white; bill and feet somewhat duller than male's.

Length 18.5–20 inches; extent 32–35; wing 8.75–9; tail 2.8–3; tarsus 1.4–1.5; middle toe and claw 2.6; bill, culmen 1.65–2, width 1; female, length 17–17.5; wing 8–8.25; tarsus 1.36; bill 1.65.

The Scaup, Big bluebill, Broadbill, or Blackhead is an abundant transient visitant along the coast and on the larger inland waters. It is one of the common winter ducks on Long Island and is fairly common in winter on the lakes. It usually passes northward from the 15th of April to the 1st of May and returns from the 1st to the 20th of October. On the inland waters its numbers diminish considerably after the 20th of November. It is most abundant about the 1st of November and the 10th of April. The principal breeding range of this duck is from North Dakota and British Columbia north to Fort Churchill and Kotzebue sound. In eastern North America its winter home is chiefly from Massachusetts to North Carolina and from the Great Lakes to Texas. The Scaup is holarctic in range, although a few years ago the American bird was considered subspecifically distinct.

Ducks of this species utter a soft purring whistle when excited or calling to their mates, and rarely the discordant note described by Seebohm as resembling the word *scaup* screamed out in an exceptionally harsh, coarse voice. On two or three occasions I have heard a flock of scaups giving utterance to these notes and the effect was the loudest and most discordant chorus of bird notes to which I ever listened, coming as it did from scores of voices over the silent water.

Marila affinis (Eyton)

(Aythya affinis on plate)

Lesser Scaup Duck

Plate 17

Fuligula affinis Eyton. Monogr. Anat. 1838. p. 157
Fuligula minor DeKay. Zool. N. Y. 1844. pt 2, p. 324
Aythya affinis A. O. U. Check List. Ed. 2. 1895. No. 149

affī'nis, Lat., allied, related, i.e. to M. marila

Description. *Male:* Markings similar to the Greater scaup's, but the wavy bars on the flanks heavier and more numerous, the gloss of the head

purplish instead of greenish. *Female* can only be distinguished from Marila ♀ by measurement as follows:

Length, *male*, 16.5–17.5; extent 29–31; wing 8; tail 2.5; tarsus 1.5; middle toe and claw 2.4–2.5; bill, length 1.6–1.85, width .95. Length, *female*, 16–16.75; wing 7.5–7.9; tarsus 1.3; bill, length 1.55, width .9.

Distribution and migration. The Lesser scaup or Little bluebill is an abundant migrant on the waters of New York State. It is more generally distributed during migration than the other sea or bay ducks and is frequently found on the smaller ponds and streams. It is occasionally observed in winter, but is common only as a migrant, arriving from the 15th to the 30th of March, passing northward from the 20th of May to the 15th of June, and returning from October 1st to 15th, and passing south from the 15th of November to the 10th of December. The principal breeding range of this species is from North Dakota and Montana to the limit of timber in the regions of the Anderson and Mackenzie rivers. The center of its abundance in winter is along the coast of the south Atlantic States. I have no reliable record of the nesting of this bird in New York State although there have been numerous reports of probable breeding. These are due no doubt to the fact that many birds of this species often remain on our waters till late in June, or even throughout the summer, but all that I have examined were nonbreeding birds.

Marila collaris (Donovan)

(Aythya collaris on plate)

Ring-necked Duck

Plate 17

Anas collaris Donovan. Br. Birds. 1809. p. 6, pl. 147
Fuligula rufitorques DeKay. Zool. N. Y. 1844. pt 2, p. 325, fig. 255
Aythya collaris A. O. U. Check List. Ed. 2. 1895. No. 150

collā'ris, Lat., collared

Description. *Adult male:* Head and upper neck black richly glossed with violet-green and purple; a *chestnut ring around the neck;* lower neck, forebreast and upper parts black, the scapulars slightly waved or dotted with grayish; lower breast and belly white, the lower belly waved with dusky; flanks tinged with bluish gray; crissum black; wings and tail fuscous or blackish brown; mirror bluish gray; *bill, base, edges* and *belt near tip pale*

bluish, tip black, the rest slaty; feet grayish blue; iris yellow. *Female and young:* Head, neck, breast, and upper parts light umber brown; *cheeks, chin,* and *eye ring white;* belly grayish white; wings like males.

Distribution and migration. This species, called also Ring-bill, Marsh bluebill, and Bastard broadbill, is a rare migrant in eastern New York and the coastal region, but in the marshes of central New York and the bays of Lake Ontario it sometimes appears in considerable numbers. In the spring of 1905, according to Foster Parker of Cayuga, it was common on the Seneca river during the month of April and remained till the middle of May. It also appears during the spring migration on the ponds and bays near Rochester, but is rarely noticed in the fall. It is apparently only a transient on our waters, the earliest spring records being February 1899, near Niagara Falls, by Edward Reinecke, and March 10, 1900, at Syracuse, by David Bruce. The latest fall date is December 10, 1897, at Brockport, by David Bruce. Mr Parker states that they arrive in the fall on the Cayuga marshes about the middle of October.

Clangula clangula americana Bonaparte

American Golden-eye

Plate 18

Clangula americana Bonaparte. Comp. List. 1838. p. 58
Fuligula clangula DeKay. Zool. N. Y. 1844. pt 2, p. 330, fig. 257
Glaucionetta clangula americana A. O. U. Check List. Ed. 2. 1895. No. 151

clăng'ula, Lat., a little noise, referring to the wing motion

Description. *Male:* Head black glossed with green, the feathers elongated to form a puff encircling the head, but slightly longer on the crown and nape, a rounded white spot in front of the eye; lower neck all round, under parts, and large patch in the wing, patches on shoulders and scapulars white; back, most of scapulars, lesser wing coverts, and primaries black; tail ashy; iris golden yellow; feet yellowish orange with dusky shading; bill greenish dusky. *Female and young:* Head snuff-brown, less puffy than male's; upper parts mostly grayish brown; chest and sides partly grayish; wing dusky with a white patch.

Length 17–20 inches; extent 27–33; wing 8–9; bill, culmen 1.3; tip to end of frontal angle 1.65–1.8; gape 2; depth 95–1.05; width 70–82; tarsus 1.35–1.55; middle toe and claw 2.5; female smaller.

Field marks. The Golden-eye can be recognized at a considerable distance, whether flying or on the water, by its stocky build, fluffy head, and distinctly black and white coloration. Our other black and white ducks with which it is sometimes confused by inexperienced observers, are the sawbills and the Buffle-head; but the longer body and slender beak of the mergansers give them an entirely different appearance, while the Buffle-head is a much smaller bird, and the head though fluffy has a large white patch on the back. A peculiar whistling sound made by the Golden-eye when in flight is also an excellent characteristic, when combined with its shape and coloration. It is, however, impossible to distinguish this species from the Barrow golden-eye at a distance and the females and young of these two species can only be determined by careful comparison and measurement.

Distribution. The Golden-eye, Whistler, Brass-eye, Great-head, Garrot, and Whistle-wing, as this species is called, inhabits the open waters of every portion of New York State throughout the winter, arriving from the north about the first of November and going north again about the last of April, being one of the most characteristic winter ducks on our lakes and rivers. Mr H. C. Higgins of Cincinnatus, N. Y., reports a young male taken in Cortland county, July 15, 1899. Mr Barnum, in his list of the birds of Onondaga county, mentions one case of its breeding there, but otherwise it is not known to nest in this State outside of the Adirondack region, where it has been recorded as a summer resident and as breeding by Dr Merriam, and also by Ralph and Bagg, who found young birds in Hamilton county during the month of June 1878 and in 1879.

The Whistler feeds mostly on shellfish and other aquatic animals which it secures by diving, sometimes in water upward of 35 feet in depth. It seems to delight in the coldest weather as long as its feeding grounds are not frozen over, and every duck hunter is familiar with the resonant whistle of its wings as it approaches his "blind" upon the frozen shore. This bird is not highly prized for food, but young whistlers when properly cooked are as good as bluebills. The note of the male Whistler is a single *peep*, accompanied by a kicking up of the feet, while the head is thrown far

back toward the tail. The duck, when startled or lost, calls out a sharp *cur-r-rew.*

Its nest is placed in a hollow tree or stump and the eggs are from 5 to 12 in number of a pale, glossy greenish, measuring about 2.35 by 1.7 inches. The downy young have the upper parts, as well as a band across the breast and the sides and thighs, dark sooty brown, marked with several white spots; chin, throat, and cheeks pure white; belly grayish white.

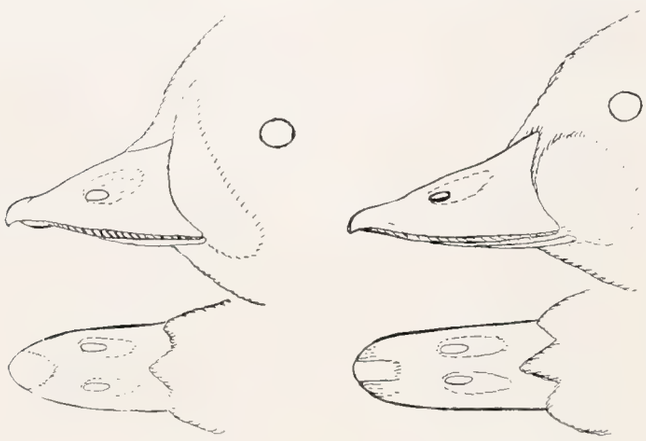
Clangula islandica (Gmelin)

Barrow Golden-eye

Anas islandica Gmelin. Syst. Nat. 1788. 1: 541
Glaucionetta islandica A. O. U. Check List. Ed. 2. 1895. No. 152

islan'dica, of island or Iceland

Distinctive marks. This species may be recognized by the *crescentic*, or wedge-shaped patch in front of the eye; by the color of the head, which is blue black, *glossed with purplish* instead of greenish black as in the preceding species; by the lengthening of the crest feathers on the crown and occiput, which is noticeably greater than in the preceding; and by the shape of the *bill* which is *relatively shorter and deeper* in the present species. The white wing patch is also divided by a black band and the white crescent on the lores comes directly in contact with the base of the bill. Females are difficult to recognize, the general coloration of the two species being the same. Islandica, however, has the white wing patch crossed by a black band formed by the black tips of the greater wing coverts, and the bill is relatively shorter and higher at the base; the distance from the anterior margin of the nostril to the tip of the bill is .66 inches in islandica and



Bill of Barrow golden-eye. ½ nat. size

Bill of American golden-eye. ½ nat. size

.75 inches in americana. The width of the nail in females of the former is .23–.3 inches and .2 in the latter. The white collar around the neck is narrower in the present species and the gray belt on the chest broader, and the brown of the head is more "hair-brown" and descends to the middle of the neck all around.

Barrow golden-eye. Clangula islandica (Gmelin). Sodus Bay specimen, author's collection. About ¼ nat. size

This arctic species is a rare winter visitor to the waters of New York State, except in the extreme northern part on the St Lawrence river, where Dr D. G. Elliot found it fairly common in 1865, and took nearly 40 specimens. There is also a male in the State Museum, Park Collection, no. 157, taken on Green Island, Albany co., January 21, 1887; one specimen from Long Island is in the Collection of the Long Island Historical Society [*see* Dutcher, Auk, 10: 270]; and the only record known for western New York is an adult male taken on Sodus bay, November 1904, by Mr John Burke of Rochester, and presented to the author's collection.

Charitonetta albeola (Linnaeus)

Buffle-headed Duck

Plate 10

Anas albeola Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 124
Fuligula albeola DeKay. Zool. N. Y. 1844. pt 2, p. 329, fig. 262
Charitonetta albeola A. O. U. Check List. Ed. 2. 1895. No. 153

charitonet'ta, Gr. χαριτόω, to make graceful, or show grace, and νῆττα, duck; *albe'ola*, Lat., diminutive of *albus*, white

Description. *Male:* Head very puffy, beautifully iridescent with green, bronze and violet-purple, a large white patch extending back-

ward and upward from the eye, broadening and meeting its fellow on the occiput; lower neck all around, most of the scapulars, wing coverts and secondaries, and under parts in general white; upper parts mostly black fading to grayish white on upper tail coverts. *Female:* Head, neck and upper parts grayish brown; spot on the ear coverts and patch in the secondaries white; under parts white tinged with grayish on breast, sides and abdomen.

Length 14–15 inches; extent 23–25; wing 6.5–7; bill 1–1.15; tarsus 1.2–1.25; middle toe and claw 2.2–2.25. Female 2 inches shorter and other dimensions correspondingly less.

Field marks. The small size, fluffy head, large white head patch, and strikingly black and white plumage of the drakes attract attention at once. The male Hooded merganser has a large triangular white patch on the head which bears a general resemblance to this species, but the lower neck is not white all around, and the bill is slim instead of short and stubby as in the present species. The female Butterball is a very small duck of insignificant appearance, rather chunky in build, but may be distinguished from the female Ruddy duck and others by the small white spot on the side of the head and the white patch in the secondaries. Her head is also somewhat puffy and the bill short.

The Buffle-head, Butterball, Spirit duck, Diedapper, and Dipper, as this bird is called, is a fairly common transient visitant throughout the State, and in the southern portion is likewise found throughout the winter. It is common during spring and fall on the Hudson and most of the rivers, lakes and ponds of western New York, being more generally distributed on small bodies of water than any other of our bay ducks, especially in spring, when it is often seen on mill ponds, canals and creeks. There is a noticeable migratory movement early in April and the last birds have usually left the State for their northern breeding grounds by the 20th of May. They return again in October and those which go farther south have usually left us by the 20th of November.

This sprightly little duck is an expert diver, as several of its names would signify, and, like the grebes and loons, was formerly supposed to be capable of dodging a gunshot. When wounded and pursued it will propel itself long distances under water using both wings and feet, and, when it

comes to the surface to breathe, dodges and dives so suddenly that it is almost impossible to capture or shoot it. It is usually called Butterball or Butterbox by the sportsmen in allusion to the fact that its entire body is encased in a thick layer of fat. Its flesh is not held in high repute, but the young are tender and well flavored.

Harelda hyemalis (Linnaeus)

Old Squaw

Plate 20

Anas hyemalis Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 126
Fuligula glacialis DeKay. Zool. N. Y. 1844. pt 2, p. 328, fig. 263
Clangula hyemalis A. O. U. Check List. Ed. 2. 1895. No. 154

harel'da, according to Newton from *Havelle*, "common Islandic name for the bird, having reference to the trilling sound of its musical notes" [Dict. p. 406]; *hyemā'lis*, of winter

Description. *Male: Breeding plumage;* sides of the head pale gray, becoming white behind the eye; the rest of head, neck, breast and upper parts in general sooty brown or blackish; upper back and scapulars varied with reddish buff; outer tail feathers white; abdomen white; base and tip of bill black, the middle portion pinkish; iris yellow; feet leaden blue with dusky webs; middle tail feathers greatly elongated, tapering and dividing toward the tips. *Winter plumage:* Head, neck and foreback white with gray cheek patches and blackish patches on the sides of the head; a broad blackish zone across the forebreast; scapulars grayish white; the rest of upper parts blackish and under parts white. *Female in summer:* Head, neck and upper parts dusky brown, the white space around the eye and another on the side of the neck; scapulars light brown with blackish centers. *In winter:* Head, neck and under parts mostly white; crown and ear spot dusky; forebreast grayish; upper parts dusky brown; the scapulars varied with light brown and gray; middle tail feathers not elongated. *Young:* Similar to winter female, but the scapulars mostly like the back, and the head and neck more extensively grayish brown.

Length, male, 21–23 inches; female, 15–16; extent 30; wing 8–9; tail, male, 8–9; female, 3; bill 1.25; tarsus 1.2; middle toe and claw 2.45.

Field marks. This duck may be recognized in summer by its dark head and neck, with a large grayish white spot about the eye; in winter by the white or light colored head and neck with blackish patches on the sides of the head. The male also has a sooty brown breast, and is our only duck, besides the Pintail, with excessively elongated tail feathers.

Distribution. The Old squaw, Old wife, Long-tailed duck, Coween, or South-southerly, is a common winter duck on the waters of Long Island, on the Great Lakes, and the Hudson and St Lawrence rivers, wherever the water is open. It is sometimes positively abundant on these waters, especially in April and November, at which season it is also quite generally distributed on the smaller lakes and rivers, sharing with the Buffle-head and Lesser scaup the reputation of being the most widely distributed of the bay ducks on the small inland waters. It leaves us in May for its arctic breeding grounds and returns again to our coasts late in October or the first of November.

The Old squaw is one of the swiftest flyers and best divers among our ducks. It is also the most noisy and at times makes the lakes resound with its loud sonorous cries which have given it the name of "Hah-ha-way" among the Crees, according to Dr Richardson. It is likewise called South-southerly on the Chesapeake and other southern waters, and Cow-he-een, or Coween, by the gunners of western New York and other localities for the same reason. This duck seems to possess an inordinate amount of blood and its vitality is so great that it can scarcely be killed by the usual methods. Its flesh is dark and rank, caused by an uninterrupted diet of shellfish and other aquatic animals. While feeding in the Great Lakes this bird is frequently taken in the gill nets at a depth of 15 fathoms and sometimes at 27 fathoms (162 feet). At Dunkirk, N. Y., between five and seven thousand have been taken at one haul [*see* Bacon, Ornithology and Oology, 17: 45]. It is a noticeable fact that the old squaws are far less abundant than they were 30 years ago, and as their breeding grounds are in the arctic regions it is probable that this wholesale destruction on the lakes is the chief cause of their decrease.

Histrionicus histrionicus (Linnaeus)

Harlequin Duck

Plate 19

Anas histrionica Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 127
Fuligula histrionicus DeKay. Zool. N. Y. 1844. pt 2, p. 331, fig. 259, 260
Histrionicus histrionicus A. O. U. Check List. Ed. 2. 1895. No. 155

histrion'icus, pertaining to a player, tricked out in colors like a clown

Description. *Male in winter:* Plumage mostly leaden bluish turning to blackish about the edges of the peculiar white markings which are dis-

tributed as follows: broad patch in front of the eye and along the side of the crown, round spot on side of head, broad dash on side of neck, collar about base of neck which is broad in the middle and narrows or disappears on the front and back, crescent in front of wings on the sides of the breast, white spot on wing coverts and bar across the ends of greater coverts and secondaries, broad streaks on scapulars and tertials, and spot in front of tail on either side, all white; broad stripe along the sides of the head backward from above the eye, sides and flanks bright rufous or chestnut; speculum dark metallic violet or purplish; bill olivaceous; iris reddish; feet bluish gray with dusky webs. *Female:* Plumage in general dark brown, darkest on head and rump, more grayish below, and nearly white on the belly; grayish white spots in front of the eye, on the cheek and behind the ear. *Male in summer and young:* Similar to the female, the male showing all gradations from the plumage of the female to that of the adult winter male which is not acquired until the third year.

Length, male, 16–17.5 inches; female, 15–16; extent 23–27; wing 7–8; tail 3–4; tarsus 1.3; bill 1.05–1.12.

Distinguishing marks.. Adult males of this species can not be confused with any other duck for an instant, but the female and young are obscure little ducks without definite markings except the two white spots on each side of the head, and the short bill, only one inch in length, higher than wide at the base.

The Harlequin is an arctic species of rare occurrence in this State during winter. It visits the Great Lakes occasionally and one specimen is said by Dr Bergtold to have been taken near Buffalo. Specimens from near Toronto are reported by Seton [Auk, 2:337] and by Fleming [Auk, 17:176]. The following New York records seem to be well authenticated.

Long Island. (No date). G. N. Lawrence Collection
Gull island, L. I. Jan. 1865. (W. W. Reeves). Dutcher, Auk, 3: 434
Bay s. of Freeport, L. I. Nov. 22, 1878. Badger, Auk, 6: 68
Fire Island inlet, L. I. Jan. 1883. Dutcher, Auk, 3: 435
Southold, L. I. Winter 1885. (G. E. Post). Dutcher, L. I. Notes
Swinburne island, N. Y. bay. Winter 1887–88. (Smith). Dutcher, Auk, 6: 134
Orient Point, L. I. Nov. 11, 1895. Worthington, Auk, 13: 78
Montauk Point, L. I. Dec. 2, 1893. (Scott). Dutcher, L. I. Notes
Bellport, L. I. Nov. 10, 1899. (Taken). W. Arthur Babson
Niagara River, Jan. 9, 1902. ♂ juvenal. (A. Thomas, H. Grieb). James Savage

In relation to the Gull island specimen, we quote from Mr Dutcher's Long Island Notes, "I shot it when I was keeper of the light in 1865, during the month of January. There were four of them living around the island

sometime before I got a chance to kill one of them. It is a male bird which I have. I crippled a female at the same time, but did not get it as the tide was running so swiftly. They were the first of the kind that I ever saw and have seen only two since. They are a diving duck and like to play around the rocks. I watched them several times while they were there and they played like small boys playing tag. I have gunned over 40 years here and as far south as Savannah, but never saw them anywhere but on the island and so think they are a rare bird." [W. W. Reeves]

Camptorhynchus labradorius (Gmelin)

Labrador Duck

Anas labradoria Gmelin. Syst. Nat. 1788. 1: 537
Fuligula labradoria DeKay. Zool. N. Y. 1844. pt 2, p. 326, fig. 258
Camptolaimus labradorius A. O. U. Check List. Ed. 2. 1895. No. 156

camptorhy'nchus, Gr. καμπτός, flexible, and ῥύγχος, beak; *labrado'rius*, of Labrador

Description. "*Adult male:* Head, neck, chest, scapulars, and wings (except quills) white; rest of plumage, including stripe on top of head and broad ring round neck, deep black; stiffened feathers of cheeks brownish white. *Adult female:* Uniform brownish gray, the wings more plumbeous; tertials silvery edged with blackish; secondaries white; primaries dusky. *Young male:* Similar to the adult female, but chin and throat white, and white of chest of adult male strongly indicated; greater wing coverts white."

"Length about 18–23.75 inches; wing 8.5–8.9; culmen 1.6–1.7; tarsus 1.5–1.6; middle toe 2.25–2.4." [Ridgway]

This species, which was also known as the Pied duck or Skunk duck on account of the black and white coloration of the male, formerly occurred, according to Audubon, "in greater or less numbers along the coast of New Jersey and Long Island." The late Mr George N. Lawrence said: "I recollect that about 40 or more years ago it was not unusual to see them in Fulton Market, and without doubt killed on Long Island. At one time I remember seeing six fine males which hung in the market till spoiled for want of a purchaser; they were not considered desirable for the table and collectors had a sufficient number." [Dutcher, Auk. 1891. 8:201–16]. Mr Wallace writing in the *Nuttall Ornithological Club Bulletin*, volume 3, page 79, says few specimens have been obtained on Long Island since 1868, and the last record known is 1874, and that four or five young males or

Labrador duck. Camptorhynchus labradorius (Gmelin). From group in American Museum of Natural History

females were obtained in the preceding 15 years. Mr Dutcher says in the *Auk*, volume 10, page 270, that several specimens of this species were shipped to England and Germany between 1843 and 1850; and in the *Auk*, volume 11, page 176, that 30 specimens are found in North American collections Of these 7 are in the American Museum of Natural History, N. Y., ♂ in the collection of the Long Historical Society, ♂ in the Brooklyn Institute of Arts and Sciences, ♂ in the Vassar College Museum, ♂ and ♀ in the State Museum at Albany.

We find references to the occurrence of this species at Laprairie, Canada, in 1862 [*see* Can. Nat. & Geol. 8:426], and at Elmira, N. Y., December 12, 1878 [*see* Gregg, Am. Nat. 13:128]; it is likely, however, that these reports were made on insufficient evidence, as no *bona fide* specimens are known from the interior. The Labrador duck was preeminently a maritime species frequenting the bars and sand shoals along the coast and feeding almost entirely on mollusks and other shellfish. Gunners for this reason often called it the Sand-shoal duck. Its breeding grounds are supposed to have been on the coast of Labrador and the shores of Baffin's bay, but as far as we know no specimens of eggs or ducklings occur in museums.

Without doubt this species is now extinct, the last specimens according to Dutcher [Auk, 11: 4–12] having been taken on the shore of Grand Manan in 1871 and on Long Island in 1875. It is probable that the cause of its extermination will remain a mystery; but its restricted range, the comparative ease of taking it, and the possibility of a calamity to its breeding grounds, may be regarded in this connection.

Somateria dresseri Sharpe

American Eider

Plate 19

Somateria dresseri Sharpe. Ann. Mag. Nat. Hist. July 1871. p. 51
Fuligula mollissima DeKay. Zool. N. Y. 1844. pt 2, p. 332, fig. 250
Somateria dresseri A. O. U Check List. Ed. 2. 1895. No. 160

somate'ria, Gr. σῶμα, σώματος, body, and ἔριον, down; *dres'seri*, of H. E. Dresser

Description. *Adult male:* Feathered angle on the forehead not extending forward as far as nostrils, feathers on sides of bill extending as

far as nostril, the bare base of the bill broad on top and extending backward on each side between the two feathered areas aforesaid in a broad arm with rounded ends (the Greenland eider has the arms of this V-shaped base of the culmen narrow and more pointed at the ends); top of head black, bordered below by pale green; rest of head white, tinged with greenish on its sides and back; throat, neck, back, scapulars and lesser wing coverts white; breast tinged with vinaceous; middle rump, upper and under tail coverts, lower breast, and belly black. *Adult female:* Plumage barred with black and rusty or ocherous, the head and neck streaked with the same. *Young:* Like the female, but more buffy.

Length 22–24 inches; wing 11.2–11.5; bill from posterior end of nostril, male, 1.35–1.45, female, 1.32; angle from extremity of loral feathering, male, 1.75–2, female 1.87; its width at middle, male .45–.5, female .22; depth of upper mandible at the frontal apex, male, 1–1.25, female .78.

Distinguishing marks. This eider is best determined by the angle and feathering on the sides of the bill; and it is practically impossible for the amateur to recognize the young and females in any other way. By referring to the description and measurements of the bill given above and under King eider he will have no difficulty when the specimen is in hand, but they can not be recognized at any great distance when alive.

Although the American eider nests as far south as the coast of Maine it is a rare visitor on the waters of New York State. Its general appearance and habits resemble those of the King eider. The following records are undoubtedly authentic:

Branchport, N. Y. Feb. 1873. Auburn List
Center Moriches, L. I. Nov. 8, 1886. ♀ juvenal. L. S. Foster, Forest and Stream, 27: 323
Smith's Point, L. I. 1880. (Helme). Dutcher
Moriches, L. I. Dec. 16, 1891. (Seaman). Dutcher
Montauk Point, L. I. Mar. 25, 1894. ♀. (Mulford). Dutcher
Ossining, N. Y. Dec. 14, 1894. Dr A. K. Fisher
Buffalo, N. Y. Rare, wv. Linden, Bergtold List
Brockport, N. Y. wv. Rare. David Bruce

Somateria spectabilis (Linnaeus)

King Eider

Plate 19

Anas spectabilis Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 123
Fuligula spectabilis DeKay. Zool. N. Y. 1844. pt 2, p. 334, fig. 251
Somateria spectabilis A. O. U. Check List. Ed. 2. 1895. No. 162

specta'bilis, Lat., conspicuous

Description. The feathering on the forehead reaching as far forward as the posterior end of the nostril, feathers on the lores reaching only halfway to the nostril. *Adult male:* Bare space on side of upper mandible enlarged into a broad rounded lobe; top and back of head bluish gray; V-shaped mark on the throat, feathers around the base of the upper mandible and small eye spot black; cheeks greenish; neck, upper back, sides of rump and wing coverts white; upper breast creamy buff; rest of plumage black. *Female and young:* Like the American eider in color, but the feathering about the sides and top of the bill like the male.

Length 20–25 inches; wing 10.5–11.3; tarsus 1.8–1.85; bill 1.25–1.32, female 2 inches.

The King eider is a winter visitor on the coast of Long Island as well as the inland lakes of New York. It occurs much more frequently than the American eider and may be considered a regular winter visitor, sometimes being decidedly common, as in the winter of 1879 on Lake Erie, and the winter of 1886–87 off the eastern end of Long Island. Its breeding range extends from the Gulf of St Lawrence northward. It is a deep water duck and feeds mostly on mussels which it is able to procure, it is said, in water upward of 150 feet in depth, and occasionally is caught like the Old squaw in the deep water gill nets of the lake fishermen. In the breeding season the males go into the "eclipse" plumage and flock together on the open sea. The female lines her nest with down as do the other species of eider, thus furnishing the famous eider down of commerce, which is gathered by the natives of Iceland, Greenland and Norway. This is taken chiefly from the Greenland and European eiders, each nest yielding about 5 ounces of down in a season.

The following are some of the records for the interior.

Onondaga lake. Jan. 20, 1877. ♂ adult. Auburn List, p. 39
Buffalo, N. Y. Nov. 26, 1879. (18 shot). Allen, N. O. C. Bul., 5: 62

Cayuga lake. Taken years ago. ♂ adult. L. A. Fuertes
Oneida lake. Several taken. Ralph & Bagg
Great Lakes. 1889. Taken in deep water gill nets. Sterling, Forest and Stream, 34: 350; *see also* Linnett, Auk, 7: 88
Irondequoit bay. Feb. 1890. David Bruce
Niagara river. Dec. about 1891. James Savage
Lake Champlain. Dec. 2, 1894. (C. L. Kirke). State Museum Collection
Lake Ontario, Monroe co. Dec. 22, 1895. ♀. George F. Guelf
Erie, Pa. Nov. 13, 1894, (5 shot); Dec. 30, 1900, (2). (Bacon). Todd, Birds of Erie, p. 526
Cayuga, Nov. 3, 1908. (20 seen, 3 shot). E. H. Eaton

Long Island dates taken from over 30 records in Dutcher's Long Island Notes range from November 1 to April 27. They occur every winter and are commonest at the eastern end of the island.

Oidemia americana Swainson

American Scoter

Plate 20

Oidemia americana Swainson in Swainson & Richardson. Fauna Bor. Am., 1831. 2: 450
Fuligula americana DeKay. Zool. N. Y. 1844. pt 2, p. 336, fig. 242
Oidemia americana A. O. U. Check List. Ed. 2. 1895. No. 163

oide'mia, Gr. οἴδημα, Lat. *oedema*, swelling, referring to the knob on the bill

Description. *Adult male:* Bill much swollen on top at the base, this whole knob and the basal half of the upper mandible yellow, or yellowish orange, the rest including the edges black; whole plumage black. *Adult female:* Dark grayish brown, under parts lighter; side and under parts of head light grayish, contrasted with the dark brown of the top and back of the head; bill blackish. *Young:* Similar to female but lighter beneath, the belly obscurely barred with grayish brown.

Length 17–22 inches; wing 8.75–9.5; tarsus 1.7; bill, culmen 1.65–1.8, depth of upper mandible at base, male .85–.95, female .7; tarsus 1.75; middle toe and claw 3.25.

Distinctive marks. Among our other scoters this species may be recognized by the uniform black color of the male; the frontal feathers do not encroach upon the bill as in the other species; tail 16-feathered; the females and young by the uniform light grayish brown or dingy whitish color of the cheeks, whereas the female Surf scoter has two whitish patches on the sides of the head and is a larger bird, but the females and young of these two species can not be recognized at a distance.

The American scoter which is known on Long Island as the Black coot, Whistling coot, or Yellow-billed coot is a common winter visitor on the coast, arriving from the north about the 15th of October, but sometimes as early as the 21st of September, and returning from the 11th to the 25th of April. At times it is abundant on the Hudson, according to Dr. Mearns, and is a common fall migrant on Lakes Erie, Ontario and Champlain. On the smaller rivers and lakes, however, it is little known, and the males in adult plumage are scarcely ever procured except along the coast. Mr James Savage refers to the great flights on Lake Erie as follows: "This species and the next are abundant on Lake Erie in October. A few sometimes arrive before September 1st, but the first big flight usually takes place the last week in September. They occur in large flocks, decoy easily and are killed in great numbers even though not desirable for the table. At the beginning of the flight last fall (1899) one gunner whom I know, killed 109 in one forenoon and quit because he had no more ammunition. The big flight of scoters this fall (1900) occurred on October 9th. On that day two men in a boat came in at the foot of Michigan street with 156. On the same day two brothers, friends of mine, shot 175 on Lake Erie near Angola, Erie co."

This scoter has the same habits as the following species and like them breeds in Labrador and the interior of arctic America, wintering on the Great Lakes and along the Atlantic coast from the Gulf of St Lawrence to South Carolina and rarely farther.

Oidemia deglandi Bonaparte

White-winged Scoter

Plate 20

Oidemia deglandi Bonaparte. Rev. Crit. de l'Orn. Europ. de Dr Degl. 1850. p. 108.
Fuligula fusca DeKay. Zool. N. Y. 1844. pt 2, p. 337
Oidemia deglandi A. O. U. Check List. Ed. 2. 1895. No. 165

deglan'di, to C. G. Degland

Description. Feathering advancing about as far on the forehead as on the lores; sides of upper mandible sunken at the base; lores separated from

the nostril by narrow space, knob on upper mandible feathered; bill wonderfully varied with orange, red, black and white; plumage black, speculum and spot behind the eye white. *Female:* Sooty brown or dusky grayish brown, lighter below; speculum white. *Winter and immature:* Similar to female, sometimes grayish white patch at base of bill and in the ear region.

Length 20–23 inches; wing 10.7–11.5; bill, culmen 1.4–1.7; depth of upper mandible at base 1.1–1.3; tarsus 1.75–2.08.

Field marks. This bird may be recognized at long distance on account of the black plumage with white speculum.

The White-winged scoter or White-winged coot is the most abundant of our three scoters and the most generally distributed throughout the State, occurring on inland waters both as a spring and fall migrant, and a winter visitor on the Great Lakes; on the coast it is an abundant winter visitant. It arrives on our waters from the 15th of September to the 1st of October and leaves us again on its northward journey from the 1st to the 15th of May. It is the only scoter which is common on the interior lakes in the spring and is often seen in large flocks during late May when the males are in perfect plumage and their bills brilliantly colored. During the fall it is chiefly young birds which are taken on the lakes. This is the nearctic or North American representative of the Velvet duck, breeding from Dakota and southern Labrador to the Arctic coast, and wintering from the Gulf of St Lawrence and the Great Lakes to South Carolina, chiefly along the coast.

These scoters prefer to gather in large flocks at sea or on the open waters of bays, lakes and rivers, especially over the beds of mollusks which abound in the waters of Long Island and the Great Lakes On the coast they feed principally on clams and scallops, but in the interior fresh-water mussels are equally sought after. They are more nocturnal or crepuscular in habit than the Scaup or Redhead.

Oidemia perspicillata (Linnaeus)

Surf Scoter

Plate 20

Anas perspicillata Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 125
Fuligula perspicillata DeKay. Zool. N. Y. 1844. pt 2, p. 335, fig. 253, 254
Oidemia perspicillata A. O. U. Check List. Ed. 2. 1895. No. 166

per'spicillā'ta, Lat., very conspicuous

Description. *Adult male:* Glossy black, duller below; a triangular white patch on forehead, and another on the nape; bill white, pink, orange and carmine red, with a large black patch on the side of upper mandible near the base; feet orange red with dusky webs; iris pearly white. *Female and young:* Sooty brown above; silvery gray below; sides of head with more or less grayish white, in the young males at least gathered into cheek and ear patches; bill blackish; feet dusky tinged with reddish; size of the smallest dimensions given.

Length 17–21 inches; extent 31–36; wing 9–10; tarsus 1.65–1.7; middle toe and claw 3.25; bill along gape 2.25–2.5.

Remarks. The male of this species has the tumid enlargement of the bill on the sides as well as above the nostrils and the feathers of the loral region do not encroach upon the sides of the bill as in the White-winged scoter. The latter character will help distinguish females and young of the Surf duck, but the absence of the white patch in the wing makes just as certain a mark, and one which can be recognized at a long distance.

Distribution and migration. This species is an abundant transient visitant along the seacoast and common along the Hudson river and Lake Champlain. It is less commonly met with on the Great Lakes, except in the fall when it is common for a few days in October. Immature specimens are occasionally taken on the central lakes, but is much less common than the White-winged scoter. It is also common throughout the winter off the Long Island coast, but rare as a winter visitant on the inland waters. It arrives from the north from the 1st to the 15th of October and disappears from the smaller inland waters by the middle of November. In the spring it leaves the Long Island waters in May, no definite dates being obtainable. This species breeds from Newfoundland and southern Labrador to Great Slave lake and the Arctic coast and is found in winter principally along the coast from the Bay of Fundy to Florida.

Erismatura jamaicensis (Gmelin)

Ruddy Duck

Plate 10

Anas jamaicensis Gmelin. Syst. Nat. 1788. Ed. 1. 2: 519
Fuligula rubida DeKay. Zool. N. Y. 1844. pt 2, p. 327, fig. 261
Erismatura rubida A. O. U. Check List. Ed. 2. 1895. No. 167

erismatū'ra, Gr. ἔρειμα, prop, and οὐρά, tail; *jamaicen'sis* of Jamaica

Description. *Male in full plumage:* Neck, upper parts and sides rich brownish red; crown and nape black; chin and sides of head nearly up to the eye line white; under parts silky white "watered" with dusky white; wings and tail blackish brown; bill and eyelids grayish blue; feet bluish gray with dusky webs; eyes reddish. *Female, young and males in obscure plumage:* Brown above with irregular and spotted bars of ocherous or buffy, giving the feathers a peppered appearance; crown and irregular band on side of head dark; cheeks, throat and under parts of a grayish white appearance, the winter males with plane white cheeks, the bases of the feathers on the breast and belly being gray and the tips silvery white; bill dusky.

Length 14.5–17 inches; extent 20–24; wing 5.5–6; tarsus 1.25; middle toe and claw 2.6; bill 1.5, width .9–.95.

Distinctive marks. The peculiar round, chunky body, small head and thick short neck of this bird make it easily recognized by its shape. It has a remarkably broad flat bill also, with an overhanging and decurved nail. The tail is composed of 18 stiffened feathers, often spiny-pointed by the wearing off of the terminal barbs, and with no observable coverts.

Distribution and migration. The Ruddy duck is a fairly common migrant on our inland lakes and rivers and in some seasons is common along the coast, but seems to be more irregular in its occurrence on Long Island waters than in the interior. It is a hardy species and is occasionally taken in midwinter, especially on the coast. Foster Parker of Cayuga has furnished one instance of its breeding on the marshes of Seneca river. On the first day of September several years ago, he found an old duck of this species with a brood of young which were so poorly fledged that they were unable to fly. I, myself, have seen this species on Buck pond, near Rochester, during the months of May and June under circumstances which led me to believe that they were nesting in that locality, but I was unable to secure

definite proof. This species appears in the spring from the 10th to the 20th of March and it is commonest about the 10th of April and usually passes northward before the 1st of May. It returns from the north from September 25th to October 15th and passes southward from November 1st to 20th. This species is found breeding in such widely separated localities as Ungava, Great Slave lake, Lower California, Guatemala, Porto Rico and Cape Cod. Its principal summer home, however, is from Dakota to the Saskatchewan.

This curious little duck is so unlike our other sea ducks, both in the structure of its bill, its general build, its spiny tail and its habits that it has been given a great number of local names, according to Trumbull and Coues, reaching a total of 60 and upward. Many systematists likewise would make it the type of a subfamily (Erismaturinae). Its colloquial names tell its natural history from the gunner's standpoint: Dumpling duck, Butter duck, Deaf duck, Sleepy-head, Diving teal, Widgeon-coot, Booby-coot, Bumblebee-coot, Bristle-tail, Spoon-billed butterball, Broad-billed dipper, Hickory-head, Shot-pouch, Chunk duck (western New York), Paddy-whack, and 40 others.

Chen hyperborea hyperborea (Pallas)

Lesser Snow Goose

Anser hyperboreus Pallas. Spicil. Zool. 1769. 6: 25
Chen hyperborea A. O. U. Check List. Ed. 2. 1895. No. 169

chen, Gr. χήν, goose; *hyperbórea*, Lat., *hyperborean*, far northern

Distinguishing marks. Differs from the Greater snow goose only in size; from the Blue goose as noted under that species.

Length 24–26 inches; wing 14.5–17; tail 5.5; tarsus 2.75–3.3; bill 2–2.15.

According to Professor Cooke, [Biol. Sur. Bul. 26, p. 65–67], this species is confined principally to the region west of the Mississippi river during migration, winters most abundantly from Louisiana to Texas and Mexico, and probably breeds on the islands of the Arctic ocean, "immediately to the north of Banks Land."

In Mr Dutcher's Long Island collection there are two specimens of Snow geese, no. 107 and 1200, both immature, which fall within the dimen-

sions given by authorities for the Lesser snow goose. One was taken on Shinnecock bay, October 8th, 1881 [*see* Dutcher, Auk, 1:34], the other on Montauk Point, October 29th, 1888.

Chen hyperborea nivalis (Forster)

Greater Snow Goose

Plate 21

Anas nivalis Forster. Philos. Trans. 1772. 62: 413
Anser hyperboreus DeKay. Zool. N. Y. 1844. pt 2, p. 350, fig. 238
Chen hyperborea nivalis A. O. U. Check List. Ed. 2. 1895. No. 169a

nivā'lis, Lat., like snow, snowy

Description. *Adult:* Plumage pure white, the wing tips black, the head often washed with rusty; bill pinkish or carmine red, the nail white and the "grinning" opening black; feet pale lake-red; iris dark brown. *Young:* Head, neck and upper parts light gray, the feathers margined with lighter; rump, tail, and under parts whitish; bill and feet much darker than in the adult.

Length 27–31 inches; extent 58–63; wing 17–17.15; tail 6.5; bill 2.3–2.65; tarsus 3–3.5; middle toe and claw 3–3.5; weight 5–6.5 pounds.

The Greater snow goose is supposed to breed mostly on Victoria Land in the Arctic ocean. It "is enormously abundant on both the eastern and western shores of Hudson bay during spring migration" and winters chiefly in the lower Mississippi valley from southern Illinois to the gulf, but is found mostly east of the Mississippi river, while the Lesser snow goose is found to the westward. The Greater snow goose is also found on the Atlantic coast from North Carolina to Cuba and occasionally winters as far north as Cape Cod, and it is assumed in the present report that all records of Snow geese in New York State where the specimens were not procured refer to this species. The following are the definite records we have of this species:

Ithaca, N. Y., March 1876. (2 young). Forest and Stream, 7: 283
Lake George, N. Y. Nov. 19, 1881. (Flock). Merriam, N. O. C. Bul. 7: 128
Ossining, N. Y. April 8, 1882. (200–300). Fisher, N. O. C. Bul. 7: 251
Moriches, L. I. Sept. 28, 1886. Adult. (Lucas & Buck). Dutcher, L. I. Notes
Lake Champlain, N. Y. Few years ago flock seen by E. G. White, Ottawa, 185 Wurtenburg st. (Some were shot.)

Cedar Island, Great South bay, L. I. Oct. 9, 1886. 3 juvenal. (Wilson). Dutcher, L. I. Notes
Amityville, L. I. Nov. 15, 1886. (Flock 20 flying southwest, Chichester). Dutcher
Atlanticville, L. I. Dec. 3, 1886. (Flock 30). (Jackson). Dutcher
Montauk, L. I. Dec. 1886. Dutcher
Cold Spring Harbor, L. I. Dec. 7, 1886. (2 seen). Forest and Stream, Dec. 9, 1886
Owego, N. Y. Fall of 1888. (J. A. Allen). J. A. Loring
Shelter Island, L. I. Apr. 3, 1889. ♂. Dutcher
Gardiners island, L. I. Oct. 1889. (2). (Lucas). Dutcher
Atlanticville, L. I. 1890. (2 killed, Knoess). Dutcher
Point Lookout Life Saving Station, L. I. Nov. 24, 1901. (Several flocks). Braislin, p. 50
Rockaway Beach, L. I. Jan. 30, 1902. (1). Braislin, p. 50
Nyack, N. Y. Nov. 18, 1903. ♀ Immature. Braislin, Auk, 21: 288

Several other records more or less indefinite occur in the *Forest and Stream* and other publications. It is evident, however, that the Snow goose is an uncommon bird in this State, but, unlike most birds which breed in the interior of British America or on the Arctic coast, and follow the Mississippi valley during migrations, it appears to be more common on the Atlantic coast and along the Hudson-Champlain valley than in western New York.

Chen caerulescens (Linnaeus)

Blue Goose

Plate 21

Anas caerulescens Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 124
Chen caerulescens A. O. U. Check List. Ed. 2. 1895. No. 169.1

caerules'cens, Lat., bluish

Description. Head and upper neck white; lower neck, back, scapulars, breast and flanks dusky gray, the feathers tipped with grayish white, or brownish, giving a somewhat scaly appearance; the dark color fades to whitish on the belly and under tail coverts; rump, and greater and lesser wing coverts bluish gray; tertials and greater coverts black along their centers, growing brownish toward their edges and quite sharply margined with whitish; wing feathers dusky toward the tips, their shafts white except near the tips; tail feathers dusky, margined and tipped with whitish; bill and feet flesh color, the "grinning recess" of the bill black; iris brown. Like other waterfowl which dabble in marshy waters charged with iron, there

is often a rusty tinge on the head and belly. Young birds have the head and neck dark grayish brown and the bill and feet dusky.

Length 25–30 inches; wing 15–17; bill 2.1–2.28, depth of bill at base 1.37; tarsus 3–3.25; middle toe and nail 2.77; outer toe 2.62; inner toe 2.12; rear toe .67.

Blue snow goose, Blue-winged goose, Blue wavy, White-headed blue brant, or White-headed goose, as this bird is called by gunners in different localities, is one of the rarest waterfowl which visit the waters of New York State. Many ornithologists have considered it merely the young of the Snow goose, but at the present time the consensus of opinion seems to be that it is a perfectly good species. The amateur may distinguish it by the white head and bluish wings and rump, since the young of the Snow goose is never known to have a white head when in dark plumage. Its habits and notes resemble those of the Snow goose and its breeding range is supposed to be somewhere in the Hudson bay region.

Several specimens of the Blue goose taken within the State have been preserved in museums as follows:

Shinnecock bay, L. I. L. I. Hist. Soc. Col. Dutcher, Auk, 10: 270
Amityville, L. I. Nov. 22, 1893. ♀. (Chichester). Dutcher Collection
Cayuga, N. Y. Apr. 1, 1896. ♂ ♀. Foster Parker. Collection of State Museum
Schenevus, N. Y. Mar. 23, 1898. Collection of State Museum
Amagansett, L. I. Mar. 21, 1887. (Edwards). Collection of Lucas & Buck, Sag Harbor. Dutcher
Miller's Place, L. I. Apr. 28, 1883. A flock of 10 seen. (Arthur H. Helme). Dutcher

Anser albifrons gambeli (Hartlaub)

American White-fronted Goose

Plate 21

Anser gambeli Hartlaub. Rev. Mag. Zool. 1852. 7
Anser albifrons DeKay. Zool. N. Y. 1844. pt 2, p. 349, fig. 236
Anser albifrons gambeli A. O. U. Check List. Ed. 2. 1895. No. 171a

al'bifrons, Lat., with white forehead; *gam'beli*, of William Gambel

Description. *Adult:* Forehead white, bordered behind with black; upper parts brownish ash; breast and belly brownish white broadly banded

or blotched with black; sides of rump, upper and under tail coverts and crissum white; bill pink, with white nail; feet chrome yellow, the claws black; iris dark brown. *Young:* Darker and browner; forehead dark; no black blotches on belly.

Length 27–30 inches; extent 60; wing 16–17; tail 5.5; tarsus 2.75–3; bill 2–2.15.

This bird has always been very rare in our State. Giraud mentions one specimen which was shot at Babylon, L. I. Professor Linden speaks of it having occurred on Chautauqua lake [*see* Buf. Soc. Nat. Sci. Bul. 4:34]. Dutcher [Auk, 10:271] records three specimens from Long Island, as follows: Great South bay, November 1846; Islip, March 18, 1849; Montauk, March 2, 1872. Dr Braislin in the *Auk*, volume 20, page 52, records a specimen from Sag Harbor, October 18, 1889. This bird, I read in Mr Dutcher's notes, was a male in beautiful plumage and was shot by Mr Byram whose dog flushed it from the rushes near his house. Mr Arthur Helme reports that he saw a flock of 11 White-fronted geese near Miller's Place April 5th, 1883. The only specimens of this goose actually taken in New York State as far as I can find are those recorded by Giraud, Dutcher and Braislin, consequently it must be regarded fully as rare as the Blue goose. The American white-fronted goose breeds on the Arctic coast of Alaska and Mackenzie region; also on the west coast of Greenland. It migrates mostly west of the Mississippi river and winters chiefly in Texas and Mexico and on the Pacific coast from lower California to the Puget sound.

Branta canadensis (Linnaeus)

Canada Goose

Plate 22

Anas canadensis Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 123
DeKay. Zool. N. Y. 1844. pt 2, p. 348, fig. 237
Branta canadensis A. O. U. Check List. Ed. 2. 1895. No. 172

bran'ta, made from Gr. βρένθος, some water bird; *canaden'sis*, of Canada

Description. Head and neck black with a broad white chin patch extending upward on the sides of the head; general color brownish gray, the feathers edged with paler; rump and tail blackish; upper tail coverts

distinctly white; lower belly and crissum white; bill and feet black; iris brown; tail usually contains 18–20 feathers.

Length 35–37 inches; extent 60–65; wing 18–20; tail 7; tarsus 3–3.6; bill 2; weight 8–14 pounds.

Field marks. The wild goose does not always fly in a wedge-shaped flock as is often asserted, but they are usually seen in flocks and their large size combined with their slow, measured wing strokes, and the long black neck with its white throat patch, as well as the white upper and under tail coverts, serve as distinguishing marks of this species. Its loud trumpetlike honks which are almost always heard as they pass over, is a sound well known to all gunners and country people.

Distribution and migration. The wild goose is probably the best known of all the waterfowl in New York State. Its migrations herald the approach of spring as well as of winter in all portions of the State. It is fairly common throughout the winter along the Long Island coast and frequently remains through the winter in western New York, as it did on Canandaigua lake in the winters of 1905–6 and 1906–7. It is fairly common as a transient in almost every county in the State, but rarely descends from its migration flight for any extended sojourn, except in the vicinity of large bodies of water, where it can rest without being molested. Along Long Island it is abundant in migration time from the 10th to the 30th of March, remaining till the 20th of April, sometimes as late as the 7th of May. In the fall it has been noted as early as September 8th, but usually makes its appearance from the 10th to the 20th of October and the greater numbers pass southward from the 1st to the 20th of December. In the interior of New York the migratory flight often begins as early as the 20th or 24th of February, but usually occurs from the 4th to the 16th of March, the species being commonest in the early part of April and passing northward from April 20th to May 8th. In the fall it makes its appearance from the 6th to the 13th of October and usually disappears from the 15th to the 30th of November. The principal summer home of the Canada goose is from Minnesota to Oregon and northward to the Yukon and northern Canada to the limit of trees. It breeds in northern Ontario, Quebec, Newfoundland and casually in Massachusetts and Vermont. No breeding

record for New York State has come to my notice. In winter it inhabits the southern half of the United States.

While most species of our wild ducks have been rapidly decreasing in numbers, the wild goose has apparently held its own in New York, probably because the breeding grounds of those geese which visit our State have not yet been disturbed by the development of the northwest. Our geese undoubtedly breed in western Labrador and the Hudson bay region and cross the country at large in their migrations, not following the lakes as much as the ducks which come to us from the interior. These birds are often seen migrating at a great hight in their well known wedge or drag shaped formation, taking a direct course for the desired destination. Mr Verplanck Colvin noticed them during his Adirondack survey, taking a southward course over the summit of Mt Marcy. The appearance of wild geese in the fall is considered the certain forerunner of sharp weather, and in the spring they invariably appear at the first breaking up of the ice in our bays and marshes, the arrival being announced by their trumpetlike honkings.

Geese feed on the scattered grain which is left unharvested, and the tender shoots of winter wheat, and in spring on the seeds, roots and small animals found in the flooded marshes, passing to the feeding grounds early in the morning and late in the afternooon from the wide waters of the lakes where they rest from their enemies. They are exceedingly wary birds, some member of the flock always being on the watch for the slightest motion or suspicious appearance. When disturbed on one feeding ground, they immediately seek a safer pasturage, and they are rarely killed in any numbers in the interior of the State, except in very stormy or foggy weather, when they sometimes lose their way or become confused and many are then secured.

Branta canadensis hutchinsi (Richardson)

Hutchins Goose

Anser hutchinsii Richardson in Swainson & Richardson. Fauna Bor. Am. 1831. 2: 470

Anser hutchinsii DeKay. Zool. N. Y. 1844. pt 2, p. 352

Branta canadensis hutchinsii A. O. U. Check List. Ed. 2. 1895. No. 172a

hutchinsi, of Mr Hutchins of the Hudson Bay Company

Description. Color exactly like the Canada goose; size smaller; tail of 16 feathers (sometimes 14 or 18 feathers).

Length 25–34 inches; extent 45–50; wing 14.75–17.75; tail 5–6; tarsus 2.25–3.2; bill 1.2–1.9.

This race of the Canada goose can be distinguished with certainty only by careful measurement and by counting the tail feathers.

According to Giraud and DeKay this species was not uncommon in their day at the eastern extremity of Long Island, where it was known as the "Mud goose," but I can find no recent records of it in Mr Dutcher's Long Island notes. Mr F. T. Pember reports a specimen from Hebron, Washington co., which was killed about 1880. Mr F. S. Webster states that it was once taken in Rensselaer county. Mr Foster Parker has a specimen in his collection killed at Cayuga about 1880, which is on the border line between the dimensions of this species and the smallest for the Canada goose. There is a specimen in the State Museum, killed at Gaines, Orleans co., in 1888, recorded by Posson [Auk, 16:193]. Dr W. M. Beauchamp in a letter to Dr Farr dated January 31st, 1900, reports a specimen shot at Baldwinsville, September 13th, 1897. It is probable that this subspecies is more common in western New York than these meager data would indicate, but it is overlooked by the ordinary observer, being considered merely the young of the Canada goose. The summer home of the Hutchins goose is principally along the Arctic coast from Melville peninsula to the mouth of the Mackenzie and the interior of Alaska. Its winter home is chiefly in California and the other southwestern states and its line of migration lies almost wholly west of Hudson bay and the Mississippi river.

Branta bernicla glaucogastra (Brehm)

Brant; Light-bellied Brant

Plate 22

Branta glaucogastra Brehm. Handbuch Vög. Deutschl. 1831. p. 849
Anser bernicla DeKay. Zool. N. Y. 1844. pt 2, p. 351, fig. 239
Branta bernicla A. O. U. Check List. Ed. 2. 1895. No. 173

ber'nicla, from Old Eng. bernekke, the barnacle said to be named from this bird

glaucogas'tra, Gr. γλαυκός, shining; γαστήρ, belly

Description. Head, neck and forepart of body shiny black, giving way abruptly to the brownish gray of the back and the lighter ashy gray of the under parts, the body feathers edged with paler; patch of white streaks

on each side of the neck; upper and under tail coverts and lower belly white; bill and feet black; iris brown.

Length 23–25 inches; extent 48–52; wing 12.5–13.5; tail 4.5; bill 1.3–1.35; tarsus 2.2–2.3; weight 4 pounds.

Distinguishing marks. The Brant differs from the Canada goose in having a black breast and lacking the white patch across the throat and the sides of the head, and from the Black brant in its whiter belly, which gives way abruptly to the black of the breast.

Distribution and migration. On Long Island waters the Brant is a common migrant, arriving from the south between the 15th of February and the 15th of March and remaining until the middle of May, a few being found until the last of that month. In fall it usually makes its appearance from the 10th to the 20th of October, a few sometimes being seen as early as the 8th of September. The most of them pass southward between the 1st and the 20th of December, but a few remain all winter. The summer home of this species is on the west coast of Greenland north of latitude 62 degrees, and the islands of the Arctic ocean north of latitude 74 degrees probably as far westward as Wellington channel and probably as far northward as land extends. Its line of migration is almost entirely along the coast, few specimens being recorded from the interior. Its principal winter range is from New Jersey to Florida.

Two specimens from Cayuga lake, November 26, 1878, and December 1877, are reported in the Auburn List; one from Buffalo by Bergtold; one from Irondequoit bay by J. H. Fleming of Toronto; from Troy by F. S. Webster; from Homer by Haight Brothers; and from Seneca river by Foster Parker.

Branta nigricans (Lawrence)

Black Brant

Plate 22

Anser nigricans Lawrence. Ann. Lyc. N. Y. 1814. 4: 171
A. O. U. Check List. Ed. 2. 1895. No. 174

nĭ'gricans, Lat., blackish

Description. Similar to the common, or Light-bellied brant, but darker on the upper parts, and the black of the neck and forebreast extend-

ing backward over a large portion of the under parts, fading on the lower belly, but *not showing any sharp line of division* between the black of the breast and the lighter color of the lower belly; crissum *decidedly white;* white collar broader than in the preceding species and meeting on the front of the neck.

Dimensions the same as for Branta bernicla glaucogastra.

The Black brant is an accidental visitant in New York State, only three records having come to my knowledge.

Off Islip, L. I. 1840. Dutcher, Auk, 10: 271

Babylon, L. I. Spring 1889. Dutcher, Auk, 10: 266

Oneida lake, N. Y. Oct. 30, 1891. Dexter, Auk, 11: 163

The summer home of this species is on the coast of northeastern Siberia, northern Alaska and eastward at least to the Anderson river. Its winter home is on the shores of the Pacific, ranging on the American side from Washington to lower California. East of the Rocky mountains it is only a straggler.

Branta leucopsis (Bechstein)

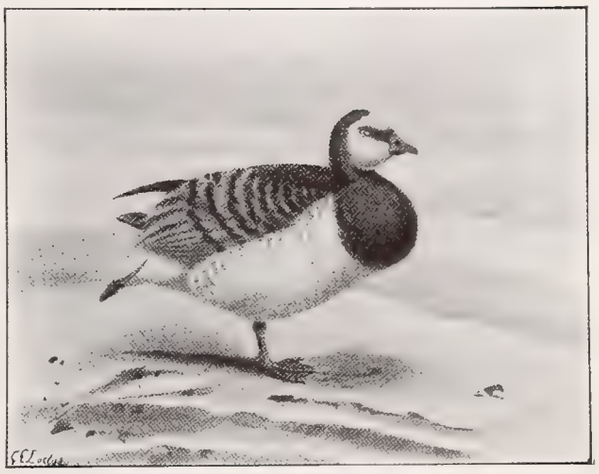
Barnacle Goose

Anas leucopsis Bechstein. Orn. Taschb. Deutschl. 1803. 424
Branta leucopsis A. O. U. Check List. Ed. 2. 1895. No. (175)

leucop'sis, Gr. λευκός, white, and ὄψις, appearance, face

Description. *Adult:* Front, sides of the head and chin white, a black line from bill to eye; rest of head, neck, and forepart of body black; scapulars, wing coverts and inner secondaries bluish gray, barred with bluish black and whitish; wings and tail blackish; breast and belly grayish; crissum and tail coverts white; bill and feet black. *Young:* Face mixed with black; plumage washed with reddish brown.

Length 25–28 inches; wing 17; tail 6; bill 1.5; tarsus 2.75.



Barnacle goose. Branta leucopsis (Bechstein). From Hudson's *British Birds.* $\frac{1}{15}$ nat. size

This old world species is an accidental visitant in the eastern United States and has been taken once in New York near Jamaica

bay, L. I., about October 20th, 1876, recorded by George N. Lawrence [N. O. C. Bul. 2: 18, also in Forest and Stream, 7: 181, 276].

Olor columbianus (Ord)

Whistling Swan

Plate 22

Anas columbianus Ord in Guthrie's Geogr. Am. Ed. 2. 1815. p. 319
Cygnus americanus DeKay. Zool. N. Y. 1844. pt 2, p. 353, fig. 235
Olor columbianus A. O. U. Check List. Ed. 2. 1895. No. 180

ŏ'lor, Lat., a swan; *columbiā'nus*, of Columbia river

Description. *Adult:* Plumage entirely white, sometimes with a rusty tinge about the head and breast; bill black with a *yellowish spot in front of the eye;* feet black; iris brown. *Young:* Ashy gray, with brownish wash on head and upper neck; smaller than the adult; feet light colored; middle portion of bill largely flesh-colored. Weight 12 to 19 pounds.

COMPARATIVE DIMENSIONS OF THE WHISTLING AND TRUMPETER SWANS

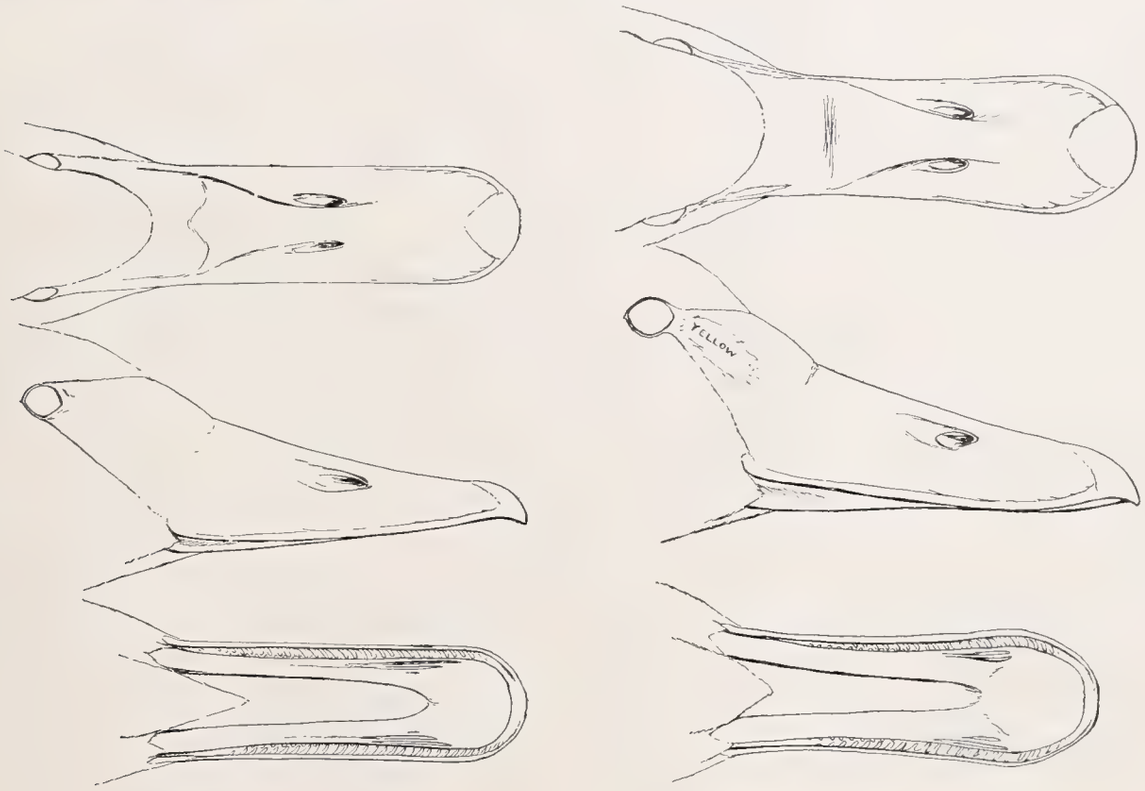
	Length	Extent	Wing	Tail	Bill, culmen	Eye to nostril	Rear of nostril to tip of bill	Tarsus	Middle toe
Columbianus.	4.5 ft	6-7 ft	21-22 in.	7-8 in.	3.62-4.25 in	2.45-2.55 in.	1.86-2.16 in.	4.-4.35 in.	5.5-6 in.
Buccinator . .	5.-5.5	8-9.75	21-27.5	8-9	4.22-5.	2.76-2.94	2.62-2.77	4.5-5.	5.5-6.5

The smaller dimensions are of immature specimens, and young of the year are still smaller in each species.

Distinctive marks. This swan is distinguished from O. buccinator, the Trumpeter swan, by its smaller size, 20 instead of 24 tail feathers, yellow or yellowish spot on the side of the bill, and particularly by the different shape and dimensions of the bill, as shown by the above measurements [*see also* text figure]. The sternum is hollowed out to receive a long fold of the trachea, which is more convoluted in buccinator, forming a vertical as well as a horizontal fold.

The Whistling swan, or American swan, breeds in the arctic regions and appears in New York as a spring and fall migrant both on the coast and on the interior lakes. It is more common in western New York than on the coast and may be regarded as a regular migrant, appearing in spring

from the 13th to the 28th of March and is rarely seen later than the 10th of April. In the fall it appears from October 21 to November 8 and has not been recorded later than December 24. Many mounted specimens of this bird, killed in western New York, have come under the author's observations, but in most cases it has been impossible to obtain any definite information concerning the date of their capture. DeKay's statement



Bill of Trumpeter swan. $\frac{5}{12}$ nat. size

Bill of Whistling swan. $\frac{5}{12}$ nat. size

that the swan formerly bred in Hamilton and Herkimer counties was based on the testimony of residents who undoubtedly made the report on insufficient evidence. At any rate, we have no good reason to believe that this bird ever bred in New York State, although it was unquestionably much more common in early times. Following are a few records of its occurrence in recent times.

Black river, Lewis co., N. Y. March 1826. (Flock). "Hough, History of Lewis county"
Lake Champlain, N. Y. About 1870. F. T. Pember
Montauk Point, L. I. About 1874. (J. Miller, J. Scott). Dutcher

Mount Morris, N. Y. Apr. 1875. Fraine. Forest and Stream, 4: 199
Cayuga, N. Y. Spring 1875. Fowler. Forest and Stream, 7: 230
Northwestern Pa. Mar. 22, 1879. Sennett, N. O. C. Bul. 5: 127
Southwestern N. Y. (Numbers brought down by sleet storm and captured)
Seneca river, N. Y. Apr. 1880. Fowler, Wright & Rathbun, O. & O. 7: 133
Highland Falls, N. Y. Oct. 21, 1880. Mearns List
Shinnecock bay, L. I. Nov. 26, 1886. Forest and Stream, 27: 364. Dutcher, Auk, 5: 176
Medina, N. Y. Spring 1886. Posson
Lockport, N. Y. Mar. 20, 1886. Cook, Biological Survey Bul. 26
Reed pond, Montauk, L. I. Nov. 5, 1886. (Juvenal). (Shot by George Hand). Dutcher, Auk, 5: 176
Branchport, N. Y. Mar. 31, 1888. (3). Verdi Burtch
Niagara co., N. Y. Below Niagara Falls. Mar. 30, 1889. (Several each season). Davison, Forest and Stream, 30, 34, 32: 295
Deerfield, Oneida co., N. Y. Mar. 13, 1890. Ralph & Bagg, Auk, 7: 230
Cayuga, N. Y. (About) Nov. 1894. Foster Parker, E. H. Eaton collection
Scarboro, N. Y. Late Nov. 1897. Gerald Thayer
Irondequoit bay, N. Y. Apr. 2, 1898. State Museum collection
Honeoye lake, N. Y. Early Apr. 1898. (3 birds seen). Wallace Reed
Flatlands, L. I. Dec. 24, 1901. Braislin, Auk, 20: 52
Buffalo, N. Y. "Repeatedly shot." Ottomar Reinecke
Canandaigua lake, N. Y. Mar. 25, 1905. (12). George B. Dixon, Ontario County Times
Keuka lake, N. Y. Nov. 1, 1905. (5). C. F. Stone
Manitou, Monroe co., N. Y. Nov. 2, 1905. John West, Democrat & Chronicle
Rush, Monroe co., N. Y. Mar. 27, 1907. John S. Gray, Post Express
Canandaigua, N. Y. Mar. 20, 1907. (28). Foster Burtis

The month of March 1908 was famous for the unprecedented migration of swans in western New York, and for the catastrophe which befell the birds on Niagara river. On March 17th, 12 swans were reported from Montezuma, and, on the 18th, 118 were seen at Mud Lock near Cayuga. These birds did not arrive in a single flock but "came in" in bunches of 15 or 20, and left sometime in the evening. On March 14th about 350 swans lit in the Niagara river near Grand Island, and on the 15th, about 11.30 a. m., more than 100 of them were swept over the falls and were taken from the river below the falls. Many of them would have survived but were killed by clubs and guns. On the 18th three more were killed, and on the 22d 12 more. This great slaughter of whistling swans was reported in the

Buffalo newspapers of March 17th, 1908, and by James Savage in the Buffalo Society Natural Sciences Bulletin 1908, volume 9, pages 23-28, and by Fleming in the Auk, volume 25, pages 306-9.

Olor buccinator (Richardson)

Trumpeter Swan

Cygnus buccinator Richardson in Richardson & Swainson. Fauna Bor. Am. 1831. 2: 464
Olor buccinator A. O. U. Check List. Ed. 2. 1895. No. 181

būccinā'tor, Lat., a trumpeter

This large species is a bird of western North America, but has been ascribed to the Atlantic states as a casual visitor by many authors. I have been unable to find any New York specimen of this swan although the Auburn List records it, page 36, as having been taken on Cayuga lake and the specimen was still extant in 1879. The Buffalo List, by Dr Gregg, page 6, also records it as an accidental visitant on the authority of the late Charles Linden, but no specimens are cited. I regret to state that I have been unable to trace the Cayuga specimen and hence can pass no judgment as to its authenticity. Also, a second specimen from Cayuga supposed to be this species, after careful measurements I have referred to columbianus. This bird was evidently an immature specimen, probably of the second year as it still retains the brownish or ashy tinge of the head and upper neck; but its dimensions reach the maximum for columbianus. Its bill though appearing perfectly black, after being scrubbed with alcohol, revealed the fact that it had been of an obscure flesh-color for a considerable space both before and behind the nostrils. Its tail feathers are 20 in number. The shape and proportions of its bill are more nearly those of columbianus.

It is probable that the Trumpeter swan was formerly an occasional visitor to this State in the days when all our waterfowl were more numerous, and such western species as the White pelican and Whooping crane are known to have been regular visitors on the Atlantic seaboard. It will be well for all sportsmen and ornithologists to make a sharp scrutiny of all

swans captured in this State in the hope that we may add this noble species definitely to our avifauna.

Order HERODIONES

Herons etc.

Order Ardeiformes, Sharpe's Hand-List

Bill long, normally sharp and horny at tip with cutting edges (Cultrirostral type); skull sloping gradually to base of bill and intimately joined with it; nostrils small and elevated, with bony surroundings; head more or less naked at least on the lores; neck long, of 15 to 17 vertebrae, easily bent into a strongly curved S-shape; legs long, the tibiae bare below; toes long, the hind one nearly or quite on a level with the front ones; wings long and broad; tail short, of about 12 feathers; skull desmognathous; carotids double (abnormal in the Bittern); food chiefly fish, reptiles, amphibians, mollusks and other aquatic animals. These birds are preeminently waders (Grallatores), and stalkers (Gradatores), moving with slow and stealthy gait, often remaining motionless and standing on one leg. They seize their prey by a quick, straight thrust of the beak. From the nature of their feet they are mostly good perchers and nest largely in trees, the nest being bulky and rude, the eggs few and plain in color. The young are psilopaedic and altricial.

Family IBIDIDAE

Ibises

Bill long, slightly compressed, almost cylindrical, grooved, curved throughout; legs short for the order; front toes webbed at base; claws compressed, sharp, resting on a horny "shoe;" tail short, usually of 12 feathers; tarsus usually scutellate in front; palate schizorhinal; no basipterygoids; occipital foramina, ambiens, femorocaudal and its accessory, semitendinosus and its accessory present; pectoralis major simple; sternum two notched on each side; tongue very small; two coeca; feather tracts broad; no powder-downs.

There are about 32 species of ibises, confined to the tropical and warm temperate regions. They inhabit marshes, swampy rivers and lake shores, some of them resembling curlews in general appearance.

White ibis. Guara alba (Linneaus). From specimen in American Museum of Natural History. $\frac{1}{3}$ nat. size

Guara alba (Linnaeus)

White Ibis

Scolopax alba Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 145
Ibis alba DeKay. Zool. N. Y. 1844. pt 2, p. 230
Guara alba A. O. U. Check List. Ed. 2. 1895. No. 184

guara, South American name; *al'ba*, Lat., white

Description. *Adult: White; tips of four or more outer primaries black;* the bare face, bill and legs orange-red, the bill tipped with dusky; iris light blue. *Young:* Grayish brown, rump, base of tail and under parts white; face and bill yellowish; legs bluish gray; iris brown.

Length 24–26 inches; extent 40; wing 11–12.5; tail 5; bill 5–7, from the nose 4.6; tarsus 3.4–3.5; middle toe and claw 2.5.

I have been unable to find any record of the occurrence of this species on Long Island since the time of Giraud, who records a specimen which was shot at Raynor South in the summer of 1836, and another procured at Moriches in the early part of March 1843. About the year 1895 one was killed near Lake Ontario and mounted by a taxidermist in Rochester, N. Y., where the fresh specimen was observed by David Bruce and recorded in his correspondence with the State Museum.

The home of the White ibis, or "Spanish curlew," is in tropical America, extending as far north as southern Illinois and South Carolina. It is purely accidental in New York State.

Plegadis autumnalis (Hasselquist)

Glossy Ibis

Tringa autumnalis Hasselquist. Reise nach Palästina. Deutsche Ausg. 1762. p. 306
Ibis mexicanus DeKay. Zool. N. Y. 1844. pt 2, p. 231
Plegadis autumnalis A. O. U. Check List. Ed. 2. 1895. No. 186

pleg'adis, Gr. πληγάς, πληγάδος, a sickle; *autumnā'lis*, autumnal

Description. *Adult: Rich dark chestnut*, glossed on the back, wings, tail, front of head with purplish green; sides and lining of wings dusky greenish; primaries greenish black; bill and legs blackish; bare face slaty blue or greenish; iris brown. *Young:* head and neck grayish brown

streaked with whitish; upper parts dusky green; bill yellowish and dusky; legs yellowish.

Length 24 inches; extent 36; wing 10–11.6; tail 4; bill 4.5–5.5; tibia bare 2.5; tarsus 3–4; middle toe and claw about 3.

This species is an occasional summer visitant in New York. Besides many rumors of its being seen, we have the following records of specimens taken:

Southampton, L. I. Sept. 12, 1847. Dutcher, Auk, 10: 271
Canarsie bay, L. I. Oct. 10, 1848. Dutcher, Auk, 10: 271
Auburn, N. Y. 1854. William Hopkins, Bost. Soc. Nat. Hist. Proc. 5: 13
Tonawanda swamp, N. Y. May 1889. Posson, Auk, 17: 193
Dunkirk, N. Y. April 1894. (J. W. Ware). Savage, Auk, 12: 393. (A specimen evidently this same bird reported by Kirkover, Auk, 15: 50)
Rochester, N. Y. 1898. (Miller, Newark, N. Y.). D. Bruce
Seneca river, N. Y. May 1902. 3 seen, 1 shot. F. S. Wright
Cayuga, N. Y. May 11, 1907. (3 seen, 2 taken). (Parker). Fuertes, Auk, 24: 338
" May 21, 1907. (3 seen). " " "

Glossy ibis. Plegadis autumnalis (Hasselquist). From specimen (immature) in State Museum. ⅛ nat. size

The Glossy ibis inhabits the tropical and warm temperate zones, in the United States straying northward to the Great Lakes and New England. The specimens taken by Mr Parker in the Montezuma marshes were evidently about to breed, the ova in the female being as large as BB shot.

Plegadis guarauna (Linnaeus)

White-faced Glossy Ibis

Scolopax guarauna Linnaeus. Syst. Nat. Ed. 12. 1766. 1: 242
Plegadis guarauna A. O. U. Check List. Ed. 2. 1895. No 187

guarāū'na, South American name

Distinguishing marks. Similar, both in size and color to the Glossy ibis, but the *lores* of the present species are *lake-red* in life and the *feathers*

surrounding the bare skin of the face are white, instead of blackish as in the preceding species; iris red.

The home of this species is tropical and warm temperate America, and in the United States extends from Texas and southern California to Wyoming and Washington. It has been found in Florida, but is extremely rare or purely accidental in the other eastern states. Its place in New York ornithology rests on a single specimen in the New York State Museum [No. 205] which was taken on Grand Island, Niagara river, August 1844 [*see* N. Y. State Mus. 3d An. Rep't, p. 22; *also*, Auk, 3: 253–54].

White-faced glossy ibis. Plegadis guarauna (Linnaeus). New York specimen in State Museum. $\frac{1}{8}$ nat. size

Family **CICONIIDAE**

Storks

Bill very stout at base and broad as forehead, long, decurved at the tip in our species, not grooved; nasal fossae wanting; tarsi mostly reticulate; claws on a horny "shoe," the middle one not pectinate; nasals holorhinal; semitendinosus muscle and its accessory present; accessory femorocaudal absent; two coeca; no powder-down.

There are 18 species or more of the Stork family found in the warmer regions of the globe. The Wood ibis, so miscalled, is the only New York species.

Mycteria americana Linnaeus

Wood Ibis

Mycteria americana Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 140
Tantalus loculator A. O. U. Check List. Ed. 2. 1895. No. 188

myctē'ria, Gr. μυκτηρίζω, to turn up the nose

Description. *Adult: White,* the *wing quills, primary coverts and tail glossy black;* bald head "livid bluish and yellowish:" bill dingy yellowish;

legs blue; feet blackish, the webs stained with yellow; iris dark brown. *Young:* Head and neck downy; plumage grayish brown, the head becoming bare and the plumage white with age.

Length 35–46 inches; extent 66; wing 17.7–19.5; bill from nostril 7–8, depth at base 2 or more; tibia bare 6; tarsus 7–8.5; middle toe and claw 4.75; weight 9–12 pounds.

The home of the Wood ibis, or American wood stork, is in tropical and austral America northward to Virginia, Illinois and California. It is of accidental occurrence in New York, five specimens having been taken in the State as follows:

Sand Lake, Rensselaer co., N. Y. June 24, 1876. (2). F. S. Webster, N. O. C. Bul. 1: 96

Glennie Falls, Ulster co., N. Y. July 8, 1884. Fisher, Auk, 2: 221

East Marion, L. I. June 21: 1890. Dutcher, Auk, 10, 266

East Galway, Saratoga co., N. Y. Aug. 1896. S. R. Ingersoll & A. S. Brower

Wood ibis. Mycteria americana Linnaeus. From specimen in State Museum. ⅛ nat. size

Family ARDEIDAE

Bitterns and Herons

Bill narrow, wedge-shaped, straight, about as long as tarsus, with long nasal fossae; tarsi scutellate in front; toes long and slender; claw of middle toe pectinate, or comblike; hind toe very long on level with front toe and its claw long and curved in the true herons, straighter in the bitterns; head long, narrow, flattened and sloping gradually to the bill; gullet capa-

cious; wings very large and broad; tail short, of 10 feathers in bitterns, and 12 in the true herons; plumage very loose; powder-down tracts two pairs in bitterns, three pairs in herons. There is great seasonal change in plumage among the true herons, most of them developing dorsal, pectoral and nuchal plumes in the breeding season, the dorsal train reaching a marvelous development in the egrets. Some species are dichromatic. The voice is rough and croaking. The female is somewhat smaller than the male, and there is considerable individual variation in size, as well as in the color of the bill and legs. One leg is almost always larger than the other, probably from the habit of standing largely on one foot. Herons nest in trees on flat bulky nests constructed of sticks. The eggs are mostly from three to seven in number, oval in shape, usually of a pale bluish color. Young are born naked and are fed in the nest by their parents like all members of the order. Bitterns rarely perch on trees, and build their broad nest made of reeds or rushes on or near the ground. The eggs are light greenish white or brownish in color.

Botaurus lentiginosus (Montagu)

American Bittern

Plate 23

Ardea lentiginosa Montagu. Orn. Dict. Sup. 1813
Ardea minor DeKay. Zool. N. Y. 1844. pt 2, p. 226, fig. 189
Botaurus lentiginosus A. O. U. Check List. Ed. 2. 1895. No. 190

botaurus, new Lat., a bittern; *lentiginō'sus*, Lat., freckled

Description. Upper parts brown, profusely mottled and freckled with buffy and ocherous; neck and under parts tawny white or ochery, each feather with a brown dark edged stripe; the throat line white with brownish streaks; a velvet black streak on each side of neck; crown and tail brown; a buffy stripe over the eye; quill feathers greenish black, washed with glaucous and tipped with brown; bill pale yellowish, brownish black on top and tip; legs greenish yellow; iris yellow.

Dimensions. This species varies greatly in dimensions. "Length 23–34 inches; extent 32–45; wing 9.5–13; bill 3; tarsus 3.5"; middle toe and claw about 3.5, the claw 1–1.12. The female is the smaller.

Distribution. This bird undoubtedly occurs, and probably breeds, in every county in this State. It is a fairly common summer resident on

Nest and eggs of American bittern.

American bittern brooding young

Young American bitterns showing first fear of man

eastern Long Island and on all the marshes of the interior. On the Montezuma marshes it is so common that a dozen birds may often be heard booming at the same time. Some of the upland counties may possibly be without breeding records for the bittern, but it seems to establish itself wherever there are weedy marshes 10 or more acres in extent. I have found it nesting at Elk lake within 10 miles of Mt Marcy, and it probably breeds in suitable localities throughout the Adirondack region whenever it is left undisturbed.

Migration. The bittern arrives from the 1st to the 10th of April in the southeastern part of New York, and from the 10th to the 20th of April in the western districts. On Long Island and in the interior the latest dates are from the 1st to the 15th of November.

Habits. From the time of its first appearance in April well into the month of June the booming of the bittern is one of the characteristic sounds of our marshes. The popular impression exists that the notes are produced while the bird's head is submerged, but such is not the case. On several occasions I have sat on a slope overlooking an extensive marsh where a number of bitterns were booming, and sometimes two or three could be seen at the same time engaged in the curious performance. They were standing quite motionless in the marsh, and every few minutes the desire to utter its love notes seemed to take violent possession of some one of the birds. It would stretch out its neck rather spasmodically, clicking its bill meanwhile three or four times, and begin a sinuous or pumping motion with the neck and forepart of the body, similar to the actions of a hawk or owl when disgorging a bone pellet, but with the head and bill inclined upward at an angle of 45 degrees or more. At each spasm or pumping motion the head and foreneck would shoot forward some distance, and the wondrous notes would finally come forth, resembling the syllables *pump-er-lunk*, or *plum pudd'n*, or, as one observer expressed it to me, *ugh plum pudd'n*, repeated several times. He certainly acts as if suffering from acute nausea, and the notes are fairly disgorged by the love-sick bittern. The sound has a hollow gurgling quality and has been compared to the sound of a wooden pump just as the water is about to come forth, or to the muffled bellow of a bull. At the distance of half a mile it is reduced to one syllable and resembles the sound made

American bittern brooding and defending young. (From *Bird-Lore*. Photo by E. G. Tabor)

while driving a stake in the mud; hence the popular names of Thunder-pumper, Stake-driver, Bog-bull etc. Persons who are unfamiliar with the bittern's note pass it by unnoticed, and I have often stood on piers and bridges where several people were congregated and bitterns were booming near by, but no one seemed to notice the strange note and when asked concerning it, they usually admitted they had never heard it before.

When flushed from its retreat on the marsh or riverside, the bittern rises with a hoarse croak, its neck stretched out, its legs dangling, and seeming to shrink in mortal terror from the impending danger, until well under way, when it makes off with slow and measured stroke of its ample wings. Its nest is placed in a secluded part of the marsh among the grass and weeds and consists simply of a broad flat pile of dead grass, flags and weed stalks. The eggs are from three to five in number, of a brownish drab color, about 2 inches in length by 1.5 in lesser diameter.

The food of the bittern consists largely of frogs as well as all kinds of small animals which inhabit the marsh, even mice and small birds, but fish are rarely found in its stomach. It often stands motionless in the grass with its bill pointing upward, its attitude, streaked neck, general hue, and the black diagonal patch on the sides of its neck, all combining to render it invisible. On several occasions I have found it quite impossible to point out successfully to companions a bittern which was standing in full view at no great distance, and often, when finally successful, have been met with the assertion that it was no bird at all.

The bittern is now protected by our laws and I see no reason why such an interesting bird should not be preserved.

Ixobrychus exilis (Gmelin)

Least Bittern

Plate 23

Ardea exilis Gmelin. Syst. Nat. 1788. 2:645
DeKay. Zool. N. Y. 1844. pt 2, p. 225, fig. 190
Ardetta exilis A. O. U. Check List. Ed. 2. 1895. No. 191

ixobrychus, perhaps from Gr. ἰξός, birdlime; and βρῦχάομαι, to bellow ; *exi'lis*, Lat., slight, small

Description. *Male:* Crown, back, rump and tail glossy black, a narrow stripe of buffy along each side of the back; hind neck, part of the

Least bittern on nest. (From *Bird-Lore*. Photo by E. G. Tabor)

wing coverts, and the outer edges of the wing quills chestnut, the rest of the neck and the under parts in general varying from light buffy to brownish yellow, the chin and throat varied with whitish; bill pale yellow, turning to blackish along the culmen; lores yellowish green; legs green; eyes and toes yellow. *Female:* Similar to male, but brown where he is black and a broader stripe of buffy on the scapulars. *Young:* Similar to female, but the feathers of the upper part tipped with buff.

Length 11–14.25 inches; extent 18; wing 4–5.25; tail 2; tarsus 1.5–1.75; middle toe and claw 1.7–2.

Field marks. The very small size of this little heron together with its buffy and black coloration will serve to distinguish it as it flies low over the flags of the marsh, or stands immovable among the sedges. Its presence in the marsh, however, will more often be determined in the breeding season by its mellow cuckoolike call, "*coo-coo-coo*" from the depths of the marsh.

Distribution. The Least bittern is locally common as a summer resident in the marshes of Long Island, the Hudson valley and the region of Lakes Erie, Ontario and the central chain. It must occur, also, on the marshes of Lake Champlain, but I can find no definite records to this effect. It is apparently rare, or absent in the upland counties, but there are reliable records from Springville, Cincinnatus, Owego and other localities where there are no extensive marshes. Its proper range is tropical and temperate America as far north as Maine and Manitoba, and it winters from Florida southward. It arrives from the south from the 7th to the 20th of May on Long Island, the earliest record being April 27th. In western New York it arrives from May 10th to the 20th, and leaves for the south September 1st to 15th, sometimes remaining as late as October 10th.

The Least bittern is our smallest member of the family, and is of shy and gentle disposition, remaining hid in the long grass of the marshes and feeding on insects and small aquatic animals. It is sometimes seen flying low over the marshes but usually travels on foot, making its way through the rank grass of the marshes with great ease. It climbs through the grass from stalk to stalk and rarely wades. The nest is built among thick sedges, or cat-tails several inches above the water, poorly supported upon the growing plants, and is often flooded, or beaten down by storms. It is a rather

flat structure composed of dead grass and flags, the tops of the sedges about it usually being bent down to form a screen above the eggs after the manner of rails. The eggs are from four to seven in number, of a light greenish white, elliptical in shape, about 1.23 x .92 inches in dimensions. The young are quite downy but not thoroughly ptilopaedic and remain in the nest for some time.

Ixobrychus neoxenus (Cory)

Cory Least Bittern

Distinguishing marks. *Neck and wing coverts rich chestnut;* under parts rufous or light chestnut; *under tail coverts black;* males have no light stripe on side of back. Size of exilis.

This species or color phase, whichever it is, has been taken several times at Toronto, and its nest found there. Although no specimens have been reported from New York it should occur on the Niagara river and along the southern shore of Lake Ontario.

Ardea herodias Linnaeus

Great Blue Heron

Plate 24

Ardea herodias Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 143
DeKay. Zool. N. Y. 1844. pt 2, p. 219, fig. 184
A. O. U. Check List. Ed. 2. 1895. No. 194

ar'dea, Lat., a heron; *hero'dias*, misspelled for Gr. ἐρωδιός and Lat. *herodius*, a heron

Description. *Adult breeding season:* Top of head, cheeks and chin white; sides of crown and occipital crest black; neck light purplish gray, the throat line streaked with black, white and rusty; upper parts mostly slaty blue; wing feathers deepening to black on the outer primaries; scapular and pectoral plumes largely pearl-gray; under parts largely black streaked with white; tibia and edge of wing chestnut-brown; bill and iris mostly yellow, the former dusky along the ridge, loral space blue; legs blackish. *Young:* Top of head blackish, no pearl-gray plumes; upper parts more of a grayish blue tinged with rusty, especially on the wing coverts; the black of the under parts replaced by ashy gray.

Length 42–50 inches; extent 68–74; wing 18–20; tail 7–8; bill 4.5–6.5; tibiae bare 3–4; tarsus 6–8; middle toe and claw 5; weight 6–8 pounds. Young in the fall from 3.5 to 5 pounds.

Distribution. The Great blue heron is a common and well known transient visitant in all parts of New York, and is locally a summer resident on Long Island as well as in western, central and northern New York. Breed-

ing colonies formerly existed in every large swamp in the State, but constant persecution and the destruction of the large trees which furnished their nesting sites have greatly reduced the number of heronries. In recent years they still existed near Cherry Creek, Lime Lake, Dansville, Potter, Cincinnatus, Johnstown, Troy, Granville, Amenia, Jamaica sound, and many other localities, but most of these have passed into history within the last two decades. At present there are large heronries in the Tonawanda swamp near West Barre, Clyde river between Newark and Clyde, Oneida lake near Constantia, several localities in the Adirondack region, the largest probably being in the vicinity of Saranac and Cranberry lakes. According to Mr O. W. Degan of Plum island there was still a breeding colony on Gardiners island in 1900. At present there are not over 50 pairs in the West Barre heronry, but according to Mr William R. Maxon, there are about 500 pairs in that at Constantia.

Migrations. This is the hardiest of all our herons and is occasionally seen in midwinter both on the coast and in the interior about the open waters of springs and streams. The spring migration seems to begin about the same time on Long Island and in the interior; the earliest arrivals ranging from March 16th to April 5th, March 30th being the average date in most localities. The greater number depart for the south between the 5th and the 20th of November. It is commonest during April, and from August to October when the immature birds are likely to be found on every creek and mill pond in the State wherever they are unmolested.

The Great blue heron is a distinct addition to the picturesqueness of our lake shores and river courses. "The haunts of coot and hern" lose much of their charm when deprived of this stately bird. Like most of the herons it nests in colonies and the old birds visit the streams and marshes for miles around in search of their favorite food of fish, frogs etc. This heron is undoubtedly the most destructive enemy of all our native birds to trout streams and fish ponds. As it visits the ponds at night when the trout are feeding in shallow water, a few herons will often levy a toll of several dozens of fingerlings in a single night. When visiting trout ponds early in the morning, I have occasionally found fish which had been speared

Photo by C. F. Stone

Great blue heron, nest. The nesting trees die after a few years.

Photo by A. W. Perrior

Great blue heron's nest and eggs

Photo by A. W. Perrior

Great blue heron. 5 nests in Constantia swamp

Swamp at Constantia, Oneida lake. Site of great heronry

by the heron's daggerlike beak and drawn ashore only to be discarded because they were too large even for his capacious gullet.

The tallest trees in the swamp are usually selected for their nesting sites. The nest is a bulky affair made of large sticks and rather flat on top. The eggs are from three to six in number of a pale greenish blue, ellipsoidal in shape and about 2.55 by 1.52 inches in size. The young remain in the nest about four weeks and often set up a rattling clamor for food, resembling somewhat the barking of a litter of young dogs.

Herodias egretta (Gmelin)

American Egret

Plate 24

Ardea egretta Gmelin. Syst. Nat. 1788. 2: 629
Ardea leuce DeKay. Zool. N. Y. 1844. pt 2, p. 220, fig. 186
Ardea egretta A. O. U. Check List. Ed. 2. 1895. No. 194

egret'ta, from French *aigrette*, a kind of heron, also a plume

Description. *Adult in breeding plumage:* Entirely white; about 50 straight plumes, or "aigrettes," spring from the back and extend considerably beyond the tail; bill, lores and eyes yellow; legs and feet black. *Immature and adults after breeding season:* Without the dorsal plumes.

Length 36–42 inches; the train of plumes extending 10 or 12 inches farther; extent 53–56; wing 14.3–17; tail 5.6–6.5; bill 4.3–5; tarsus 5.5–6.75; tibia bare 3.5. The females have the smaller dimensions.

Distribution. This species inhabits tropical and temperate America as far north as Virginia and Missouri. After the breeding season it straggles northward as far as Oregon, Manitoba and Nova Scotia. In our State it is an occasional summer visitant. Giraud speaks of its occurrence on Long Island as "not frequent" and mentions a flock of five which remained on Coney island beach for several days. Numerous accounts of "White cranes" or White herons which have been seen in different parts of the State have come to my notice, and undoubtedly refer to this species. Besides these we have the following records of specimens taken or seen by reliable observers:

Auburn, N. Y. (William Hopkins). Bost. Soc. Nat. Hist. Proc. 1856. 5: 13
Ossining, N. Y. Early Sept. 1870. Fisher, N. O. C. Bul. 4: 62; Forest and Stream, 11: 482

Cattaraugus creek, Erie co., N. Y. Aug. 10, 1881. ♂ juvenal. Eaton, Auk, 13: 178
Medina, N. Y. Ernest H. Short
South Oyster Bay, L. I. Aug. 3, 1882. ♂. Dutcher, Auk, 1: 32
Cayuga, N. Y. Aug. 1882. Parker
Herkimer, N. Y. Spring 1882. Ralph & Bagg
Sunham's bay, Lake George, Warren co., N. Y. Latter part of May or first of June 1883. Merriam, Auk, 1: 59
Carlton, Orleans co. 1883. (Davison). Forest and Stream, 24: 204
Kent, Orleans co., N. Y. July 27, 1883. (3 seen, 2 killed). Posson, Auk, 16: 193
Gardiners island, L. I. Summer 1884. W. W. Worthington
Alcott, Niagara co., N. Y. Aug. 18, 1886. Davison, Auk, 4: 159
South Barre, Orleans co., N. Y. About Apr. 25, 1887. (Col. Fred Miller). Neil F. Posson
Deerfield and Marcy, N. Y. Nov. 10, 1889. Ralph & Bagg List, Auk, 8: 230
Baldwinsville, N. Y. Sept. 1895. A. W. Perrior, "1896." W. M. Beauchamp
Skaneateles, N. Y. About 1893. "
Newark Valley, Tioga co., N. Y. June 1896. G. B. Sutton
Jamaica bay, Queens co., L. I. Oct. 1, 1897. Braislin, Auk, 17: 69
Montauk, L. I. July 23, 1900. Braislin, Auk, 19: 145
Penn Yan, N. Y. Spring. Auburn List, Forest and Stream, 7: 325
Dresden, N. Y. Years ago. James Flahive
Ontario co., N. Y. Aug. 1905. Wallace Reed
Shinnecock bay, L. I. July 17, 1884. Dutcher, Long Island Notes
Fire Island, L. I. July 27, 1884. (Martin). Dutcher, Long Island Notes
Southampton, L. I. Aug. 1890. (Burnett). Dutcher, Long Island Notes
Long Island. (Years before 1890 mounted several, Knoess). Dutcher, Long Island Notes

Egretta candidissima (Gmelin)

Snowy Heron

Ardea candidissima Gmelin. Syst. Nat. 1788. 2: 633
DeKay. Zool. N. Y. 1844. pt 2, p. 221, fig. 187
A. O. U. Check List. Ed. 2. 1895. No. 197

candidis'sima, Lat., very white

Description. *Adult:* Plumage entirely white; a train of about 50 plumes or "aigrettes" springs from the interscapular region, recurved at the tips; plumes also grow from the occiput and lower neck, the latter, however, are nearly straight. *Young:* Similar, but lacking the plumes. Lores, base of bill, eyes and toes yellow, tip of bill and legs black.

Length 20–27 inches; extent 36–41; wing 8.5–11; tail 4; bill 2.25–3.6; tarsus 3.25–4.5; tibia bare 2.5.

Field marks. This species may be distinguished from the white phase of the Little blue heron by having the wings entirely white and the legs black; and from the Large white egret by its smaller size.

Distribution. The range of this species coincides closely with that of the American egret. According to Giraud it was formerly not uncommon on Long Island from "late in the spring till the last of September." In early days it undoubtedly bred in the Long Island swamps, and as late as May 30th, 1885, Mr Dutcher saw three specimens on Great South beach which were evidently trying to nest [*see* Auk, 3: 435]. During the summers of 1881, 1882, 1883, 1884 and 1885 small companies of these birds numbering from three to seven were observed on different occasions along the south coast of the island, but since that time it is rare or only an occasional visitor [*see* Dutcher, Auk, 1: 32]. Dr Braislin in Auk, volume 17, page 169, mentions a flock of six or seven observed at East Rockaway in August 1899. Mr Hendrickson in Dutcher's Long Island Notes reports one from Queens county, May 16, 1889. Specimens from the interior have been reported from Buffalo, in Dr Bergtold's List, page 6, from Sing Sing by Dr Fisher, from Lake Ontario, 1889, by Chapman, *Forest and Stream*, volume 33, page 497, and from Saratoga county, summer of 1893, by Messrs Brower and Ingersoll of Ballston Spa.

Hydranassa tricolor ruficollis (Gosse)

Louisiana Heron

Egretta ruficollis Gosse. Jamaica. 1847. 338
Ardea ludoviciana DeKay. Zool. N. Y. 1844. pt 2, p. 223
Ardea tricolor ruficollis A. O. U. Check List. Ed. 2. 1895. No. 199

hydranas'sa, Gr. ὕδωρ, water, and ἄνασσα, queen; *tri'color*, Lat., three-colored; *ruficol'lis*, rufous-necked

Description. *Adult:* Bill very slender; feathers of head and neck elongated and pointed; upper parts slaty blue; back of head and most of neck deepening to purplish maroon; the longer feathers of crest white; upper throat, rump and under parts mostly white; jugular plumes purplish and plumbeous; a scapular train of fringelike plumes sweeping beyond the tail, "light drab" in color; legs dusky in front and yellowish behind; bill black

and yellow; lores yellow; iris red. *Young:* Without plumes; head and neck mostly rusty; upper parts plumbeous marked with rusty; otherwise similar to the adult.

Length 23–28 inches; extent 36–40; wing 8.5–11; tail 3.5; bill 3.6–5; tarsus 3.5–4; tibia bare 2.25; middle toe and claw 3.

Distribution. It ranges through tropical and austral North America, rarely north to New Jersey and Indiana. Its only claim to a place in the New York list rests on "a single specimen shot near Patchogue in the summer of 1836" [Giraud, Birds of Long Island, p. 282].

Louisiana heron. Hydranassa tricolor ruficollis (Gosse). From specimen in State Museum. ⅛ nat. size

Florida caerulea (Linnaeus)

Little Blue Heron

Ardea caerulea Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 143
DeKay. Zool. N. Y. 1844. pt 2, p. 222
A. O. U. Check List. Ed. 2. 1895. No. 200

flor'ida, named for the state; *caerū'lea*, Lat., blue

Description. *Adult:* Usual phase slaty blue, becoming purplish chestnut or maroon colored on the head and neck; base of bill and bare loral space blue; tip of bill and legs black; eyes yellow. *Young* (and sometimes adults): Pure white, the longer quills tipped with bluish slate. Specimens varied with patches of white are not uncommon. In the young, the legs, feet and lores are mostly greenish yellow, usually showing some trace of bluish.

Distinguishing marks. The slaty blue wing tips and the greenish yellow legs distinguish the white phase of this bird from the Snowy heron

Little blue heron. Florida caerulea (Linnaeus). From specimen in American Museum of Natural History. ⅓ nat. size

at a considerable distance. The inexperienced sometimes mistake the Little green heron for this species, but a slight attention to the descriptions will dispel the error.

Distribution. This species inhabits tropical and warm temperate America from Guiana and Columbia to Kansas and Virginia, and like other southern species sometimes straggles northward as far as Nova Scotia and even to Labrador. It was rare on Long Island even in Giraud's day, and must be regarded as only an accidental summer visitant. The following are the records of specimens taken:

Great South bay, L. I. Aug. 17, 1847. Dutcher, Auk, 10: 271
Shelter Island, L. I. Aug. 16, 1881. (Worthington). Dutcher, Notes
Far Rockaway, L. I. Apr. 3, 1885. Lawrence, Auk, 2: 272

Little blue heron. Florida caerulea (Linnaeus). From specimen (immature) in American Museum of Natural History. $\frac{1}{3}$ nat. size

Moriches, L. I. July 1889. (T. M. Lawrence). Dutcher, Notes
Shelter Island, L. I. Apr. 7, 24, 1891. (Byram). Dutcher, Notes
Montauk, L. I. Apr. 20, 1898. Dutcher, Notes
East Rockaway, L. I. Aug. 1899. Braislin, Auk, 17: 69
Hempstead bay, L. I. Summer 1900. Braislin, Auk, 19: 146
Also reported as seen at Oneonta by Yager in August 1899; and at Binghamton, May 8–12, 1900 by Miss Lillian Hyde

Butorides virescens (Linnaeus)

Green Heron

Plate 23

Ardea virescens Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 144
DeKay. Zool. N. Y. 1844. pt 2, p. 224, fig. 188
A. O. U. Check List. Ed. 2. 1895. No. 201

butorī'des, Lat. *butor*, bittern, and Gr. εἶδος, resemblance; *vires'cens*, Lat., greenish

Description. The top of head crested and greenish black; rest of head, and the sides and back of the neck rich chestnut, washed with vinaceous; throat and narrow line down the foreneck whitish streaked with blackish; back and wing coverts green, the latter edged with buffy white, and the elongated interscapular feathers washed with glaucous or bluish gray; under parts brownish ash; quills and tail dusky with a plumbeous shade; bill dusky, base of lower mandible and lores yellow; legs greenish yellow. *Young:* Similar but the head and neck more rusty than chestnut and streaked with ocherous buff, no dorsal plumes; the wing coverts broadly margined with buffy.

Length 15.5–22 inches; extent 24–26; wing 6.4–8; tail 2.65; bill 2–2.5; tarsus 2; tibia bare .9–1.

Field marks. At a distance the Little green heron does not appear green and the old birds are much more likely to show a bluish cast from the plumbeous shading of the back and the wing quills. It may be distinguished from the bitterns, the only other small herons common in the State, by its prevailing dark coloration, while the bitterns are of a yellowish brown or ocherous hue.

Distribution. The Green heron is common in tropical and temperate America as far north as Manitoba and New Brunswick. In New York it is quite generally distributed, except in the Adirondack region, and probably

breeds in every county, excepting Franklin and Hamilton, and may yet be found in the lower portions of these counties. In the southeastern portion of the State it arrives from the south from the 6th to the 20th of April; in the western portions from the 25th of April to the 5th of May. Its time of departure in the fall seems to vary greatly according to different observers. I have found it in western New York to be from the 5th to the 15th of October and Dr Fisher in Westchester county from the 2d to the 20th of October. Others give it as early in September.

Photo by L. S. Horton
Green heron's nest and eggs

The Green heron, Fly-up-the-creek, Shitepoke or Chalk-line, is perhaps the most familiar member of this family in most parts of New York, as it is found along the small streams and ponds, as well as the larger swamps and lakes. Its food is principally frogs, minnows and crawfish. The voice of this little heron is shriller and less hoarse than those of the other herons, a somewhat guttural *qua-qua*. It is more easily observed on account of its diurnal habits and like the Kingfisher and Spotted sandpiper is the interesting companion of many a canoe trip on our New York rivers. They breed singly or in small colonies, the nest being placed in an alder, willow or thorn tree not far from the creek and usually about 15 feet from the ground. It is a slovenly structure of small sticks and is con-

siderably smaller than a crow's nest, so loosely put together that the eggs may often be seen from the ground. These are from three to six in number, elliptical, pale greenish, and about 1.38 x 1.12 inches in size.

Photo by L. S. Horton

Young Green herons

Nycticorax nycticorax naevius (Boddaert)

Black-crowned Night Heron

Plate 24

Ardea naevia Boddaert. Tabl. Pl. Enl. 1783. 56
Ardea discors DeKay. Zool. N. Y. 1844. pt 2, p. 227, fig. 185
Nycticorax nycticorax naevius A. O. U. Check List. Ed. 2. 1895. No. 202

nycti'corax, Gr. and Lat., Night-raven, the classic name of the Night heron; *nœ'vius*, Lat., birth-marked, spotted

Description. *Adult:* Top of head, back and scapulars glossy greenish black; front and sides of head and lower parts generally white; rump, wings and tail ashy gray; two or more narrow white occipital plumes several inches

in length; bill black; lores greenish; legs yellow; eyes red. *Young:* Grayish brown above streaked and spotted with tear-shaped spots of buffy white; under parts grayish white streaked with dusky; bill dusky; legs dull grayish green; iris grayish brown.

Length 23–26 inches; extent 43–46; wing 11–13; tail 5; bill 3; tarsus 3–3.4; middle toe and claw 2.8–3.1; tibia bare 1.

Both species of Night heron are of medium size, about that of the common bittern; but shaped quite differently from the other herons. Their bodies are stouter and the neck and legs comparatively short. Their bills are also shorter and stouter than those of the other herons. The present species is the one common in New York State and can easily be distinguished from the Yellow-crowned species when in the adult plumage, but careful attention must be given to immature specimens to determine them accurately. The common Night heron is well known in the vicinity of its rookeries by its nocturnal habits and the hoarse cry which has given it the common name of *Quawk*.

The Quawk is a common summer resident on Long Island and in the Hudson-Champlain valley as far north as Washington county, but is quite local in distribution, being confined to the vicinity of a few large heronries during the breeding season. The most famous of these heronries have been located in Nassau county; on Gardiners island; on Constitution island, Hudson river; and near Dunsbach Ferry, Saratoga co. Less important breeding stations have existed in recent years near Granville, Washington co.; at West Seneca and Boston, Erie co.; and various localities on Long Island and the Hudson river. It is a regular transient visitant on the central lakes and along Lakes Erie and Ontario, young birds being not uncommon about the last of September, but whether these come from heronries located in the Ontario-St Lawrence valley, or are wanderers from southern localities, I am unable to state. This bird often remains throughout the winter on Long Island, but the usual winter range is from Virginia southward. It inhabits the greater part of America from Argentina to Manitoba and New Brunswick.

Nyctanassa violacea (Linnaeus)

Yellow-crowned Night Heron

Ardea violacea Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 143
DeKay. Zool. N. Y. 1844. pt 2, p. 228, fig. 199
Nycticorax violaceus A. O. U. Check List. Ed. 2. 1895. No. 203

nyctanas'sa, Gr. νύξ, night, and, ἄνασσα, queen; Lat. *violā'cea*, violet-colored

Description. *Bill very stout*, much shorter than tarsus; general color bluish plumbeous striped above with black; *top of head and elongated patch on its side white, rest of head black;* bill black; lores greenish; eyes orange. *Young:* Similar in color to the young of the preceding species, but the top of the head is blackish, marked with buffy white, and the *quills slate color without rufous markings.* The general color is somewhat darker.

Length 22–27 inches; extent 44; wing 10.5–12.5; tail 5; bill 2.5–3, depth at base .7–.94; tarsus 3.25–4; tibia bare 2; middle toe and claw 2.75.

Yellow-crowned night heron. Nyctanassa violacea (Linnaeus). From specimen in State Museum. ¼ nat. size

The home of this species is in tropical and austral America, north to Illinois and North Carolina, straggling northward as far as Nova Scotia. It is one of the rarest of herons in New York State. Giraud and DeKay give no definite records and evidently took its occurrence for granted. Charles Linden in the Buffalo List, page 7, speaks of it in the same indefinite terms. Mr Truman R. Taylor of Rochester, N. Y., writes that he examined a specimen killed several years

ago at Long Pond, Monroe co.; and Mr Arthur Babson that he took a specimen at Bellport, L. I. in 1897. The only specimen recorded by Mr Dutcher [*see* Auk, 10: 266] was killed at Freeport, L. I., in April 1893. Another specimen was taken at Wading river in April 1901 by A. Hoffman and is now in the collection of Arthur H. Helme [Braislin, Birds L.I., p. 54]. A fourth Long Island specimen was taken at Orient in the fall about 1892 and is owned by Dr Henry Heath of Brooklyn [Braislin, Auk, 24: 187]. A fifth was observed at Orient, May 4–7, 1905, by Roy Latham [Braislin, *loc. cit.*].

Order PALUDICOLAE

Marsh Birds

Orders Ralliformes and Gruiformes, Sharpe's Hand-List

This polymorphic and unsatisfactory group includes several extralimital families of widely divergent characters. In North America it is represented by two suborders, the Grues, or Cranelike birds, and the Ralli, or Raillike birds.

Family GRUIDAE

Cranes

Heronlike in stature; neck and legs much elongated; head partly naked, wattled and sparsely grown over with stiff hairs; bill rather long, straight, and blunt pointed; nasal fossae short and shallow; nostrils, near middle of bill, open and pervious; tibiae largely bare; tarsi scutellate in front; toes rather short, webbed at base; hallux small and elevated; wings large, the rear edge when spread curving forward on account of the shortening of the outer cubitals; inner wing feathers flowing; fifth cubital wanting; plumage compact; no powder-downs; tail short, of 12 feathers; palate schizognathous; nasal schizorhinal; no basipterygoids; coeca very long; oil gland tufted.

There are 18 species of cranes, found in nearly all parts of the world. They are striking and graceful in appearance and are famous in the countries which they inhabit for their migratory flights which are performed in Indian file at a great elevation and heralded by their raucous, rattling clamors. Their flesh is esteemed for food, but they are very wary and

difficult to procure. They subsist principally on frogs, insects, snails and mice, in fact are rather omnivorous feeders. Cranes nest on the wide unfrequented plains and marshes of the Northwest, in America, and are fast being driven to the more remote mountains and arctic marshes. The eggs are usually two in number, of a brownish drab color, irregularly spotted with different shades of brown. The shell is quite rough with warty elevations. The young are covered with down and run about soon after hatching, but are fed for some time by the parents.

Grus americana (Linnaeus)

Whooping Crane

Ardea americana Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 142
Grus americana DeKay. Zool. N. Y. 1844. pt 2, p. 218
A. O. U. Check List. Ed. 2. 1895. No. 404

grus, Lat., a crane; *americā'na*, American

Description. Plumage *white*, except the *wing quills* which are *black;* the bare skin of the head carmine red with a growth of black hairs; bill dusky greenish; legs black; eyes yellow. *Young:* Head feathered; general color whitish, washed with rusty brown.

Length 50–54 inches; extent 90; wing 22–25; tail 9; bill 5.5–6; depth at base 1.4; tarsus 11–12; middle toe and claw 5.

The home of this bird is in the interior of North America from Minnesota and Dakota to Slave lake and south in winter to Florida, Texas and Mexico. In colonial times it was evidently common in the Atlantic States as far as New Jersey, New York and New England, but there are no definite records for New York in recent times. I was told that a specimen of this bird, mounted about 15 years ago at Ward's Natural Science Establishment in Rochester, N. Y., was killed near Cayuga lake, but I have been unable to trace the specimen. In recent years its line of migration lies almost wholly west of Lake Michigan.

DeVries in his Journal, describing the country of New Netherlands, mentions White cranes as occurring (1639–42) with the swans, geese and ducks which swarmed on the coast of New York bay [*see* N. Y. Hist. Soc. Col. 2, 3, 110].

Grus mexicana (Müller)

Sandhill Crane

Plate 24

Ardea (Grus) mexicana Müller. Syst. Nat. Sup. 1776. p. 110
Grus americana DeKay. Zool. N. Y. 1844. pt 2, p. 218 (part)
Grus mexicana A. O. U. Check List. Ed. 2. 1895. No. 206

mexicā'na, of Mexico

Description. Whole plumage *brownish gray*, or bluish gray; bare portions of the head dull red sparsely overgrown with stiff hairs. *Young:* Varied with rusty brown; the head entirely feathered.

Length 40–48 inches; extent 80; wing 21–22.5; tail 9; bill 5–6, depth at base .95–1.1; tarsus 9.5–10.6; middle toe 3.5; tibia bare 4.6–5.

For the benefit of those who persist in calling the Great blue heron a crane, it may be said that these birds have a superficial resemblance to each other, but belong to different orders and are quite different in details of structure and habits. A slight attention to the description and plate 24 will show the difference between them. Furthermore the crane is not found in the Eastern States, except in very rare instances.

Although this bird occurred in New York during colonial times, neither Giraud nor DeKay mention it as having been taken within our borders. It is included in Dr Bergtold's Buffalo List as an accidental visitant, on the authority of Charles Linden and Otto Besser. Mr Posson in his manuscript notes on the birds of Orleans county states that a specimen of this species "was secured near Albion about 1880, and another in the town of Clarendon, about 1886." Mr David Bruce writing to the State Museum says, "a fine example was shot by Mark Cooke of Brockport, May 20, 1885. It was in fine plumage and had been for several days in the same place." This is evidently the second specimen referred to by Mr Posson, who gives David Bruce as his authority. I have talked with Mr Bruce and others who saw this specimen before it was destroyed by fire in the meat market at Brockport, and am convinced that there was no error in regard to the identity of the bird, or the place of its capture.

Family RALLIDAE

Rails, Gallinules and Coots

Size medium to small; body compressed; head rather small and narrow; thighs very muscular; legs stout; toes very long, the hallux much longer than in Limicolae and lower down; bill not sensitive, short and somewhat henlike in the crakes, gallinules and coots, but long and slightly curved toward the end in rails proper; nostrils pervious; wings short, rounded and feeble; tail short, of 10 or 12 weak feathers; colors subdued and blended; palate structure schizognathous; nasals holorhinal; no basipterygoids; ambiens present, also gall bladder, two carotids and long coeca; plumage aftershafted; oil gland tufted.

Rails and gallinules are marsh birds, very secretive in habits, keeping well under cover of the dense rushes and grasses, except at night or in the twilight, when they venture out on the muddy shores. When silently floating along the marshy stream, one may often see them standing motionless near their favorite coverts, or walking deliberately along the margin flirting their upturned tails and bobbing their necks in henlike fashion. Their cries are also loud, and remind one of the different notes of our domestic fowl. Consequently all our species of the family, from the Virginia rail to the Coot, have received the common name of Mud hens in this part of the country. The flight of rails and gallinules is feeble and hesitating. They usually take wing as a last resort, and then proceed with dangling legs, in a direct course, low over the tops of the rushes, dropping abruptly in a few rods amidst the grass, as if exhausted by their unwonted exertion. They are perfectly at home on the ground, and dart among the dense weeds with marked freedom, the long toes keeping them from sinking in the mud or submerged vegetation, their thin bodies gliding easily between the reeds. The eggs are numerous, oval or elliptical in shape and sparsely spotted; the young are precocial. The food consists of all kinds of aquatic animals, and the seeds and tender shoots of plants. The family numbers about 180 members, in all parts of the world.

This is an ancient family, rich in fossil species, and some insular varieties, like the wekas of New Zealand, are entirely flightless. The family in

general is considered degenerate and several species are threatened with extermination. We fear that our own Black rail may be among this number.

Rallus elegans Audubon

King Rail

Plate 25

Rallus elegans Audubon. Ornithological Biographies. 1835. 3: 27, pl. 203
DeKay. Zool. N. Y. 1844. pt 2, p. 260, fig. 221
A. O. U. Check List. Ed. 2. 1895. No. 208

ral'lus, Lat., rail, referring to the rattling cry; *ē'legans*, choice, elegant

Description. Upper parts *brown*, or brownish black, the feathers broadly *margined with tawny olive;* wing and tail feathers olive-brown; wing coverts varying from rufous to rich chestnut; top of head and hind neck plain dark brown; throat and line over the eye nearly white; *breast* and *foreneck deep cinnamon* or rufous; sides, flanks and axillars brownish black, distinctly barred with white; under tail coverts white coarsely spotted with blackish; bill dusky brown on top and tip, base and lower mandible mostly yellowish brown; legs yellowish brown; eyes reddish brown; legs and bill tinged with reddish in high plumage.

Length 17–19 inches; extent 23–25; wing 6–7; tail 2.5; bill 2.1–2.5; tarsus 2.3; middle toe and claw 2.2–2.6; tibia bare about .7–1.

Field marks. The King rail is distinguished from the Virginia rail by its much greater size; from the Clapper rail by the general olive-brown, instead of grayish color of the upper parts, and the bright rufous instead of buffy breast. It is also a fresh-water species, whereas the Clapper rail inhabits the salt or brackish marshes.

Distribution. The King rail inhabits the eastern half of the United States, being resident in the Southern States. In New York it is apparently an uncommon summer resident and is most abundant in the great marshes of central and western New York. Dutcher records four specimens from Long Island [*see* Auk, 5: 176]. From western New York there are several records by Langille, Reinecke, Savage, Posson, Eaton and Bruce. These are mostly fall birds, killed in August, September and October. The earliest date of arrival in the State is March 3d, 1887, when a specimen struck the Montauk Light. The latest dates are November 2d, 1886,

Bayport, L. I.; late November, about 1894, a specimen taken by Foster Parker on the Cayuga marshes; December 3, 1897, James Savage took one at South Buffalo; Dr H. D. Reed reports a specimen taken at Ithaca, November 27th, 1901. These records, when considered with the New England records of December 14, January 20, and February, seem to indicate that the species may almost be regarded as a permanent resident at the northern limit of its range. It is a fairly common summer resident on the Cayuga marshes according to Mr Foster Parker who is well acquainted with it, but on account of its extreme shyness it is rarely seen. Mr Dutcher records a summer specimen from Shinnecock bay, L. I., but the exact date is unknown. Mr Reinecke found a nest and 10 eggs of this species at Point Abino, Ontario, near Buffalo, on May 30, 1894. He also skinned and dissected a specimen containing a fully developed egg, which was shot by George E. Harris in South Buffalo, May 23d, 1891.

So far as I know no one has seen the King rail in the act of uttering its note. Mr Brewster describes it as deep and guttural, sometimes harsh and vibrant, "a grunting *umph, umph, umph, umph*, the notes being on the same key and separated by rather wide but approximately regular intervals." Chapman describes its supposed call as "a loud startling *bup, bup, bup, bup, bup*, uttered with increasing rapidity until the syllables were barely distinguishable and ending somewhat as it began, the whole performance occupying about five seconds."

Rallus crepitans Gmelin

Clapper Rail

Plate 25

Rallus crepitans Gmelin. Syst. Nat. 1788. Ed. 1. 2: 713
DeKay. Zool. N. Y. 1844. pt 2, p. 259, fig. 222
A. O. U. Check List. Ed. 2. 1895. No. 211

crĕ'pitans, Lat., clattering

Description. Upper parts *ashy gray*, shading to olive-brown in the center of the feathers; neck and breast varying from creamy buff to pale

cinnamon-buff, often shaded with ash; sides, flanks and axillars grayish brown with narrow bars of white; wings and tail brown, the wing coverts pale cinnamon; throat, eyelids and line over the eye white.

Length 13.5–16 inches; extent 20; wing 5–6.25; tail 2–2.5; bill 2–2.5; tarsus 1.7–2.25; middle toe and claw 2–2.3.

Distribution. The Clapper rail ranges along the Atlantic seaboard of the United States, regularly to Long Island and casually to Massachusetts. It is a common summer resident on the salt marshes of our State and ascends the Hudson accidentally as far as Ossining. According to Mr Worthington it is rare in the vicinity of Shelter Island. It has been reported two or three times from the interior of the State, especially from Syracuse, by Mr Dakin, who was a careful ornithologist, but, in default of the specimens, we must infer that these interior records should be referred to the young of the King rail. This species is frequently met with throughout the winter on Long Island, but the principal number are migratory, arriving from the 3d to the 20th of April and departing late in October.

The Clapper rail, Salt-water marsh hen, or Mud hen, inhabits the grassy salt marshes of Long Island, Staten Island and New Jersey. They are abundant in the extensive marshes of the south coast of Long Island, but uncommon about the eastern end and on Staten Island. They remain under the cover of the dense sedge grass during the greater part of the day or when danger is near, and it is almost impossible to flush them, except at high tide when the marshes are flooded. Then if a boat is pushed through the grass they can be driven from their hiding places. In this manner they are shot in large numbers, but their flesh is much inferior to that of the Sora.

Clapper rails are noisy birds as both their scientific names and their common names would indicate. Their nest is concealed in the salt marshes and consists of a pile of dead rushes and grasses. The eggs are from 7 to 12 in number of a buffy or clay-white color, rather sparingly spotted with reddish brown and obscure purplish. The dimensions average 1.72 x 1.20 inches.

Rallus virginianus Linnaeus

Virginia Rail

Plate 25

Rallus virginianus Linnaeus. Syst. Nat. Ed. 12. 1766. 1: 263
DeKay. Zool. N. Y. 1844. pt 2, p. 261, fig. 223
A. O. U. Check List. Ed. 2. 1895. No. 212

virginiā'nus, of Virginia

Description. In color very similar to the King rail; but the sides of the head bluish ash; legs more reddish. *Immature:* Darker, more or less blackish below becoming whitish on throat and central line of the belly. *Downy young:* Uniform glossy black as in all the genus Rallus.

Distribution and migration. The Virginia rail is a fairly common summer resident on the marshes of Long Island and central and western New York, and undoubtedly breeds in every county of the State, with the exception of the Adirondack region. Along the smaller streams and marshes it is less common, but everywhere is more abundant than is popularly believed. It arrives from the south in April, from the 10th to the 27th, and leaves for the south late in October, passing the winter in the Southern States, Cuba and Central America. The breeding range seems to be confined to the upper austral, transition and lower boreal zones.

Virginia rail on nest. (From *Bird Lore*. Photo by E. G. Tabor)

The Virginia rail, or little Mud hen, inhabits the grassy marshes, keeping rather more on the landward side than the Sora, and usually placing its nest on dryer ground and rarely in the flooded marshes. It is well concealed in the brush, or dense grass, and is composed of dead flags or grasses, piled

Photo by James H. Miller

Virginia rail's nest and eggs

up in a rather shallow, flat mound. The eggs are usually 8 to 12 in number, pale grayish or buffy white, spotted with reddish brown and obscure lilac, averaging about 1.25 x .95. Mr Brewster gives us an admirable account of its notes as follows: "About the middle of April we begin to hear in our marshes, usually in the early morning, late afternoon or during cloudy weather, and coming from some briary thicket or bed of matted reeds, a guttural *cut, cut, cutta-cutta-cutta* repeated at brief intervals, often for hours in succession. This is occasionally interrupted or closely followed by a rapid succession of low, yet penetrating grunts not unlike those of a hungry pig. The Virginia rail is the author of both these sounds, the former appearing to be peculiar to the male and, no doubt, his love song. When heard very near at hand it has a peculiar vibrant quality and seems to issue from the ground directly beneath one's feet. The grunting notes are given by both sexes but, with rare exceptions, only during the breeding season. The female when anxious about her eggs or young also calls *ki-ki-ki* and sometimes *kiu* like a Flicker." [Bird-Lore, 4, 2, 47]

Porzana carolina (Linnaeus)

Carolina Rail or Sora

Plate 26

Rallus carolinus Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 153
Ortygometra carolina DeKay. Zool. N. Y. 1844. pt 2, p. 262, fig. 224
Porzana carolina A. O. U. Check List. Ed. 2. 1895. No. 214

porzā'na, Ital., name of the European spotted crake; *carolī'na*, of Carolina

Description. Upper parts *olive-brown*, the feathers with blackish centers; back and *scapulars streaked with white;* forepart of head, *chin and throat black;* sides of head and neck together with the *breast bluish gray;* wings dusky brown; the outer edge of first primary white; belly and under tail coverts white, the crissum tinged with rufous; sides and flanks barred with slaty black and white; bill light greenish yellow; legs greenish; iris brown. *Young: No black on face*, nor bluish slate on foreparts; throat and belly whitish; *neck and breast light olive-brownish. Chicks:* Black, with orange beard.

Range and migration. This species inhabits the nearctic region from about latitude 41 degrees, to Hudson bay and Slave lake, wintering from

Virginia, Missouri and California to South America. It is our most abundant species of Rail, being common in the marshes of central New York and the Great Lake region and probably breeding in nearly every county in the State, but is uncommon as a summer resident in our coastal district. It is an abundant transient visitant on the tidal marshes, as well as throughout the interior, but is undoubtedly less common than formerly on account of the great slaughter by gunners, which attends its autumnal migration. Spring arrivals on the coast date from the 28th of April to the 9th of May as shown by Mr Dutcher's Notes. In western New York it arrives from the 20th to the 30th of April, and in Canandaigua, on one occasion, I heard its note on the 5th of April. On the 6th of March 1900, a Sora was picked up in the snow at Buffalo and brought to Mr Ottomar Reinecke. It was greatly emaciated and had probably been driven out of its course by the strong southwest wind which had prevailed for three days before its capture. This is one of many similar occurrences in the Eastern States. The Sora is commonest during September and early October, departing for the south from October 10th to the 30th, a few stragglers sometimes remaining until the marshes are entirely frozen.

Sora. Porzana carolina (Linnaeus). Immature specimen in State Museum. ½ nat. size

The nest of the Sora is composed of coarse reeds and grasses which are piled up among the growing grasses until the top is a few inches above the water which usually covers the site selected to a depth of 2 or 3 inches.

The green tops of the grasses are gathered together and slightly interwoven above the nest, forming a loosely constructed arbor to shelter the eggs. If the water rises, additions are made from time to time until the structure is several inches in hight. The old bird drags the wet or dead grasses from the marsh on to the nest by the same route so that there is frequently a well defined approach rising from the marsh to the summit of the nest. The nest is broad and flat, probably larger in proportion to the size of the bird than that of any other of our common species. The eggs are from 8 to 14 in number, larger sets which are sometimes found probably being the laying of two birds. The eggs are darker in color than the Virginia rail's, of a strong buffy drab ground-color and blunter at the small end, but spotted much like those of other rails. They average 1.22 x .9 inches.

Photo by C. F. Stone

Sora's nest and eggs

Like other rails the young are covered with a jet-black down with a tuft of orange bristles on the throat and leave the nest soon after hatching. On several occasions, I have come upon a Sora's nest when the young were hatching and some were still wet from the shell, but even these would follow their mother from the nest and start to wade or swim off and hide amid the grass. It is an interesting sight when a Sora like a diminutive hen is sur-

prised leading her family of 12 or 14 downy black chicks along the sedgy bank of the stream.

In the fall soras feed largely on the seeds of grasses, especially the wild rice (Zizania) and become fat and well flavored. At this season Sora shooting is much practised on the New Jersey, Delaware and Chesapeake marshes, the gunners being poled at high tide through the flooded coverts. The birds are called rail-birds, sorees and ortolans, the last being the common restaurant name, simply because a Sora, like the Ortolan of Europe, is a small, delicious bird.

Mr Brewster gives the following account in *Bird-Lore*, 4, 2, 48:

In the more open, grassy stretches of meadow, as well as among the beds of cat-tail flags, but seldom, if ever, in thickets of bushes, we also hear, after the middle of April, mingling with the notes of the Virginia rails and the din of countless frogs, the love song of the Carolina rail, a sweet, plaintive *ér-e* given with a rising inflection and suggesting one of the "scatter calls" of the Quail. Such, at least, is its general effect at distances of from fifty to two or three hundred yards, but very near at hand it develops a somewhat harsh or strident quality and sounds more like *ká-e*, while at the extreme limits of ear range one of the syllables is lost and the other might be easily mistaken for the peep of a Pickering hyla. This note, repeated at short, regular intervals, many times in succession, is one of the most frequent as well as pleasing voices of the marsh in the early morning and just after sunset. It is also given intermittently at all hours of the day, especially in cloudy weather, while it is often continued, practically without cessation, through the entire night.

Equally characteristic of this season and even more attractive in quality is what has been termed the "whinny" of the Carolina rail. It consists of a dozen or fifteen short whistles as sweet and clear in tone as a silver bell, the first 8 or 10 uttered very rapidly in an evenly descending scale, the remaining ones more deliberately and in a uniform key. The whole series is often followed by a varying number of harsher, more drawling notes given at rather wide intervals. Although it is probable that the "whinny" is made by both sexes I have actually traced it only to the female. She uses it, apparently, chiefly as a call to her mate, but I have also repeatedly heard her give it just after I had left the immediate neighborhood of her nest, seemingly as an expression of triumph or rejoicing at the discovery that her eggs had not been molested. When especially anxious for their safety and circling close about the human intruder she often utters a low whinnying murmur closely resembling that which the muskrat makes while pursuing his mate and sometimes a *cut-cut-cutta* not unlike the song of the

Virginia rail, but decidedly less loud and vibrant. In addition to all these notes both sexes have a variety of short, sharp cries which they give when startled by any sudden noise.

Coturnicops noveboracensis (Gmelin)

Yellow Rail

Plate 26

Fulica noveboracensis Gmelin. Syst. Nat. 1788. Ed. 1. 2: 701
Ortygometra noveboracensis DeKay. Zool. N. Y. 1844. pt 2, p. 263, fig. 225
Porzana noveboracensis A. O. U. Check List. Ed. 2. 1895. No. 215

cotur'nicops, Lat. *coturnix*, quail; Gr. ὄψ, face, appearance; *noveboracĕn'sis*, of New York

Description. Upper parts striped with brownish yellow and blackish, and narrowly barred with white; head, neck and breast pale brownish yellow, or ocherous, shading to whitish on belly; flanks blackish, barred with white; "under tail coverts cinnamon"; *secondaries white.*

Length 6–7.5 inches; wing 3–3.6; tail 1.5; bill 50–60; tarsus .8–1; middle toe and claw 1–1.12.

Field marks. The small size and general yellowish hue of this bird distinguish it from the other rails. Some young soras are nearly yellowish brown in color of the foreparts, but the white markings of the back are lengthwise instead of transverse as in the Yellow rail. When the bird is flushed there is no possible chance of mistaking it as this species shows a conspicuous white patch in the wings formed by the white secondaries.

Distribution. The Yellow rail inhabits eastern North America, north to Nova Scotia, Hudson bay and Slave lake, wintering southward to Cuba. In this State it is chiefly a transient visitant, but its nest will probably be found within our borders. The nearest approach to a breeding record that I can find is a specimen in the State Museum, no. 283, labeled," Braddock's bay, June, 1880." There is a winter record for Long Island in Mr Dutcher's collection, 1913—Sayville, January 17, 1894. From the records of 33 specimens taken in the State, 5 are without definite dates. Of the remaining 28, 15 were taken in October, 6 in September and 3 in April, with 1 record each for August, November, January and June. 11 of these specimens were taken on Long Island, 6 in the marshes bordering on Lake

Ontario, 9 near Buffalo, 6 on the central lakes—Canandaigua 4, Penn Yan 1, Oneida county 1—and 1 in Putnam county. Between September 20th and October 11th, 1907 Mr Hermann Grieb of Buffalo, N. Y., saw 12 or 15 of these birds at Rattlesnake island, Niagara river. During the three weeks while the birds were in the marsh, he saw them at every visit and collected five or six specimens. The others were flushed, but at such close range that they were not shot, but were easily identified by the white wing patches. Mr Todd in his *Birds of Erie*, pages 533–34, gives the migration dates as April 23 to May 3; and September 15 to October 29. It is evident that this is a regular migrant through our State and should be looked for about the first of May and the first of October.

Nuttall describes the note of the Yellow crake as "an abrupt, cackling cry *'krek, 'krek, 'krek, 'krek, 'kuk, 'k 'kh.*" Mr J. H. Ames of Toronto describes its note as a scolding, *kik-kik-kik-kik-queah.* When much surprised his specimen uttered a longer call *kik-kik-kik-kik-kik-kik-kik-kik-ki-queah*, like the famous Kicker of the Massachusetts marshes [Auk, 19:94].

Creciscus jamaicensis (Gmelin)

Little Black Rail

Plate 26

Rallus jamaicensis Gmelin. Syst. Nat. 1788. Ed. 1. 2: 718
Porzana jamaicensis A. O. U. Check List. Ed. 2. 1895. No. 216

creci'scus, Lat. *crex*, crake; *jamaicĕn'sis*, of Jamaica

Description. Very small; head, neck and lower parts *dark slate color* becoming blackish on belly; hind neck and *foreback chestnut-brown;* the upper parts speckled and *finely barred with white;* flanks and lower belly barred with white. Length 5–6 inches; wing 2.75–3; tail 1.35; tarsus .80; bill .5.

The Little black rail inhabits temperate North America from the West Indies and western South America to Oregon, Illinois and Massachusetts. On account of its secretive habits, its migration and breeding range are imperfectly known. It seems to be an uncommon species in all parts of the United States and very few nests have ever been found. As it has bred in New Jersey, Connecticut and probably in Massachusetts there is little doubt that it breeds on Long Island and perhaps in the Hudson valley

and western New York. I can find records of only five specimens actually taken in New York State:

Penn Yan, Yates co., N. Y. Spring 1870. (John Gilbert). Birds of Cen. N. Y., p. 35
Watkins, Schuyler co., N. Y. Spring 1872. " " "
Jamaica, L. I. Spring 1879. R. B. Lawrence, N. O. C. Bul. 5: 117
Canarsie, L. I. Spring 1884. (C. Sargood). Forest and Stream, Aug. 7, 1884, p. 24; *also*, Grinnell, Forest and Stream, Aug. 7, 1884, p. 24
South Oyster Bay, L. I. Aug. 1, 1884. (L. S. Foster). Forest and Stream, Aug. 7, 1884, p. 24

The Black rail has also been reported as seen at close range by Mr F. S. Webster, Watervliet, 1873; by Dr T. J. Wilson, May 30, 1874, on Seneca river, below Cayuga [Auburn Daily Advertiser, Sept. 3, 1887]; by Nathan L. Davis near Brockport, October 1892; and by the late David Bruce on two occasions at Lake Ontario, Monroe county.

The nest of this bird found in Connecticut contained nine eggs, creamy white, speckled all over with dots of rich reddish brown and a few heavier ones near the larger end. Dimensions about 1.05 x .8 inches.

The Black rail is even more difficult to flush and more mysterious in habits than the Yellow rail. Its note has been described by Mr March of Jamaica as *chi-chi-cro-croo-croo*, several times repeated in a sharp and high tone [Baird, Brewer and Ridgway, Water Birds, 1: 379]. The Kicker, whose notes are so fully described by Mr Brewster in the *Auk*, volume 18, pages 321–28, is supposed to be the Black rail, but may possibly refer to the Yellow rail whose notes are doubtless similar. The commonest Kicker notes are as follows: *Kik-kik-kik, quéeah; Kik-kik-kik, ki-quéeah; Kik-ki-ki-ki, ki-quéeah; Kìc-kic, kìc-kic, kìc-kic, kìc-kìc, ki-quéeah.*

Crex crex (Linnaeus)

Corn Crake

Rallus crex Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 153
Crex crex A. O. U. Check List. Ed. 2. 1895. No. (217)

crex, Gr. κρέξ; Lat. *crex*, a crake, referring to the note

Description. *Wing coverts* above and below *chestnut*, or rusty brown; quills rufous brown; bill, eyes and legs pale brown. Otherwise, in size and color similar to an overgrown Sora.

Length 10 inches; wing 5.75; tail 2· tarsus 1.6; bill .9.

This palearctic species, the common Land-rail of Europe, is of casual occurrence in eastern North America. There are four New York records:

Oakdale, L. I. Nov. 2, 1880. Dutcher, Auk, 5: 177
Cohoes, N. Y. Nov. 6, 1883. Park, Auk, 2: 296
Amagansett, L. I. About Aug. 15, 1885. Dutcher, Auk, 3: 435
Montauk Point, L. I. About Nov. 1, 1888. Dutcher Collection, 1213. *See* Forest and Stream, Apr. 3, 1890.

Corn crake. Crex crex (Linnaeus). Albany county specimen, State Museum. ½ nat. size

Ionornis martinica (Linnaeus)

Purple Gallinule

Plate 27

Fulica martinica Linnaeus Syst. Nat. Ed. 12. 1766. 1: 259
Ionornis martinica A. O. U. Check List. 1895. No. 218

ionor'nis, Gr. ἴον, violet, ὄρνις, bird; *martĭ'nica*, of Martinique

Description. Head, neck and under parts *rich purplish blue*, becoming *bluish green on sides* and lining of wing, and blackish on belly; back and

wing coverts olive-green; under tail coverts white; legs yellow; *frontal plate bluish*; bill carmine tipped with yellow. *Young:* Duller, more brownish above, and whitish below. Size the same as young of Florida gallinules, but *middle toe shorter than tarsus*, and inner posterior surface of tarsus *scutellate*, and *nostrils oval.*

This is a species of tropical and lower austral America, wandering northward to Wisconsin, Ontario and Nova Scotia. According to Giraud it was extremely rare on Long Island 60 years ago, and DeKay puts it in the extralimital list. Mr Nicholas Pike, however, states that it was formerly plentiful on the island [*see* Dutcher, Auk, 10: 272]. There is a specimen from Indian pond, Flatbush, L. I., in the Collection of the Long Island Historical Society; and another in the State Museum, "obtained within the State" by J. G. Bell. Our latest record seems to be from Middle Island, L. I., summer of 1879 [Helme, O. & O., 7: 118].

Occasional reports of the Purple gallinule in New York which I have investigated prove to refer to high plumaged specimens of the following species. A reference to the plate will dispel any illusion with regard to the difference between the two species.

Gallinula galeata (Lichtenstein)

Florida Gallinule

Plate 27

Crex galeata Lichtenstein. Verz. Daubl. 1823. p. 80
Gallinula galeata DeKay. Zool. N. Y. 1844. pt 2, p. 264, fig. 234
A. O. U. Check List. Ed. 2. 1895. No. 219

gallī'nula, Lat. diminutive of *gallī'na*, hen; *galeā'ta*, Lat., helmeted

Description. Forehead with a broad horny plate, or shield, reaching backward and expanding from the base of the culmen; nostrils *slitlike*, near center of bill; tarsus *reticulate on its inner posterior edge*, otherwise scutellate; *middle toe longer than tarsus. Adult: Head, neck and under parts dark bluish slate color*, becoming whitish on the belly; back brownish olive; wing and tail feathers dusky; lateral under tail coverts, edge of wing and *flank stripe white;* tarsus and toes greenish; ring around tibia, frontal plate and most of bill red; eyes reddish brown. *Immature:* Colors duller; under parts whitish; bill and legs dull colored. *Downy chicks:* Black with silvery beards.

Length 12–14 inches; extent 20–23; wing 6.5–7.5; tail 3; tarsus 2.25; middle toe and claw 3; bill, including frontal shield, 1.7–1.85, from rear of nostril .80.

The Florida gallinule is a fairly common summer resident in the more extensive marshes of central and western New York and the Ontario-St Lawrence valley, but does not seem to occur except in a few places in the coastal district, or through the Hudson valley. It has recently been found to be a common breeder in the marshes of Newark, N. J., and Long Island City. In the Hudson-Champlain valley it is a neglected species, and records have been made only at Ossining, Highland Falls, Green Island, and Lake Bomoseen, Vt., but it is undoubtedly well established in all large marshes of that region. In the Montezuma marshes it reaches its greatest abundance in New York State, and hundreds of broods are annually reared, the greater portion of which are destroyed by gunners at the beginning of the shooting season.

The Florida gallinule arrives from the south from the 20th to the 30th of April and departs from the 15th to the 30th of October. Soon after arriving the birds pair and construct their nests amidst the dense growth of flags or marsh grass. It is a bulky structure composed of dead grass and flags. The eggs, which are deposited from May 25 to June 20, are from 8 to 14 in number of a buff or brownish white color, spotted and dyed with brown and neutral shell markings. They average 1.75 x 1.2 inches in size.

This is the common American gallinule, or Red-billed mud hen, of the gunners, which is responsible for the greater portion of the henlike notes heard from the dense coverts of the marshes. They are frequently seen swimming across the open spaces among the reeds, but do not live on the water as generally as the coots. Mr Brewster gives a fine description of their notes:

Like the rails they are given to skulking among the grass or flags but at morning and evening we occasionally see them swimming across pools or ditches, their brilliant scarlet bills and frontal shields flashing in the level beams of the rising or declining sun. They are noisy birds at this season and some of their cries are second only to those of the Bittern in strength and grotesqueness. One of their common-

est vocal performances is a loud and prolonged outcry consisting of a succession of henlike *cucks*, given rather slowly and at nearly regular intervals, and frequently ending with a harsh, drawling *kée-ar-r*, *krée-ar-r*. They have other calls so numerous, complex and variable that it is difficult to describe them briefly and at the same time adequately. Sometimes they give four or five loud, harsh screams very like those of a hen in the clutches of a hawk, but uttered more slowly and at wider intervals; sometimes a series of sounds closely resembling those of a brooding hen when disturbed, but sharper and louder, succeeded by a number of lower, more querulous cries intermingled with subdued clucking; occasionally something which sounds like *kr-r-r-r-r*, *kruck-kruck*, *krar-r*, *kb-kb-kb-kb-kea-kea*, delivered rapidly and falling in pitch towards the end. Shorter and more frequent utterances are a low *kloc-kloc*, or *kloc-kloc-kloc* and a single explosive *kup* very like the ejaculation of a startled frog. Nearly all these cries are loud and discordant and most of them are curiously henlike. [Bird-Lore 4, 2, 50].

Fulica americana Gmelin

American Coot

Plate 27

Fulica americana Gmelin. Syst. Nat. 1788. Ed. 1. 2: 704
DeKay. Zool. N. Y. 1844. pt 2, p. 272, fig. 233
A. O. U. Check List. Ed. 2. 1895. No. 221

fū'lica, Lat., coot (from sooty color); *americā'na*, of America

Description. Under plumage very dense for aquatic life; *toes with large rounded flaps* or lobes on each joint; nostrils linear. General color *dark slate*, the head and neck nearly black, the back tinged with olive; marginal under tail coverts, edge of wing, and tips of secondaries white; feet olive-green; *bill whitish*, the frontal shield and spot near the tip deep reddish brown; eyes red.

Length 13–16 inches; extent 23–27; wing 7–8; tail 2; tarsus 2–2.2; middle toe and claw 3; bill, without frontal shield, 1.25–1.6; weight 16–20 ounces.

The Coot is a common transient visitant in the marshes of New York State but is much less common in the spring than during the fall migrations. It arrives from the 1st to the 20th of April and passes northward from the

1st to the 16th of May; a few remain to breed in the Montezuma marshes and about the eastern end of Lake Ontario. Some seasons quite a number of them are found; other years they seem to be entirely absent as summer residents. They also breed in the Newark marshes of New Jersey, and Mr Hendrickson thinks that they have bred in company with the gallinules at Long Island City. In fall, migrant coots begin to appear in numbers from the 15th to the 20th of September and the few which are not killed

Nest and eggs of American coot. (From *Bird-Lore*. Photo by Bent)

by our gunners disappear from the 1st to the 20th of November, occasional stragglers remaining well into December.

Coots swim as lightly and easily as ducks and are occasionally seen on the wide waters of our lakes and bays. They prefer the shallow lagoons, however, near the shelter of dense reeds and flags, whither they retreat when danger threatens them. When rising from the water they patter for a long distance on its surface until they have gained sufficient momentum to launch themselves in the air, when they fly off at a low elevation with legs stretched backward very much in the manner of rails and gallinules.

When in our waters the coots are usually silent birds, but sometimes utter a low *kluck*, and when gathered in numbers they engage in a confused gabbling and clattering.

The Coot's nest is a mass of flags and dead vegetation, but resembles the grebe's more than the gallinule's in location, being built up in the shallow water in a slight opening among the flags. The eggs are from 8 to 16 in number, of a buffy white, minutely and uniformly dotted with blackish brown and obscure tints, sometimes in larger blotches; average size 1.9 x 1.32 inches.

This is the Mud hen, Meadow hen, Water hen, Crow bill, Hen bill, Crow duck, Blue peter or White-billed mud hen of the gunners. Its flesh, though palatable, is inferior to that of the Sora and our better ducks.

Order LIMICOLAE

Plover, Snipe etc.

Order Charadriiformes, Sharpe's Hand-List

Small, or medium sized; bill with a soft skin covering more or less of the basal portion, grooved from the base to the hardened terminal portion; nostrils open slits in the membraneous basal portions; legs normally long and slender, and scutellate, at least in front; tibia usually bare for some distance; front toes, at least the middle and outer, usually connected at the base with a small web; hind toe smaller and elevated, or wanting; claws small, sharp and slightly curved; wings normally long, flat and pointed, the outer primaries longest, the inner secondaries elongated, giving the extended wing a V-shaped appearance; tail rather short, stiff, broad and rounded. Cervical vertebrae 15, cervico-dorsals 2, dorsals 5 to 6; palate schizognathous; nasals schizorhinal.

Most members of this order prefer the shore, mud flats, or open marshes, and feed on mollusks, crustaceans and insects in the mud or along the moist strand. They nest upon the ground. The eggs are usually four in number, well spotted or blotched with dark colors, which renders them quite inconspicuous among the grass or pebbles. The young are precocious and covered with a soft gray or buffy down marked with blackish, and lie quite flat and still when approached, to escape being seen by their enemies. Many of the species are gregarious in habit and perform extensive

migrations, probably surpassing all other orders in the development of the migratory instinct, several of our species breeding on the arctic islands and wintering on the plains of Patagonia. Their voices are mellow, piping, or whistling, and can be heard from a long distance. Their plumage is mottled or varied. They are prized as game birds, the Woodcock, Snipe, Golden plover and Upland plover being in high repute with sportsmen and epicures.

Family **PHALAROPIDAE**

Phalaropes

Small birds with dense, ducklike plumage, and lobate feet; tarsus compressed and serrulate behind; the lobes or toe margins scalloped in at the joints; hallux slightly lobed; bill as long, or longer, than head, grooved for three fourths or more of its length, rather hardened and pointed at the tip.

Phalaropes are good swimmers and are frequently seen far out at sea resting on the water like flocks of diminutive ducks. They often swim while feeding, whirling about in the shallow water to stir up the minute insects from the bottom, and seizing them as they are swept about in the little whirlpool thus created [Chapman]. The female Phalarope is larger and more brightly colored than the male. She does the courting and turns over the duties of incubation to the male. This reversal of Nature's usual order in reproductive habits is not confined to this family, but is also characteristic of the Painted snipe (Rostratula) of the Oriental, Ethiopian and neotropical regions, as well as of the Old World Hemipodes (Turnicidae).

Phalaropus fulicarius (Linnaeus)

Red Phalarope

Plate 28

Tringa fulicaria Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 148
Phalaropus fulicarius DeKay. Zool. N. Y. 1844. pt 2, p. 268, fig. 232
Cymophilus fulicarius A. O. U. Check List. Ed. 2. 1895. No. 222

phala'ropus, Gr. φαλαρίς, coot; πούς, foot; *fulicā'rius*, Lat. cootlike; *fulica*, Lat., a coot

Description. Bill depressed, broad and somewhat spatulate; feet semipalmate and broadly scallop-lobed. *Female in summer: Under parts*

and front and sides of neck dark reddish chestnut; sides of head white; top of head and feathers around base of bill sooty; upper parts blackish, the feathers broadly margined with tawny or buff; wings grayish brown, a broad band of white through the secondaries and tip of greater coverts; primaries blackish, the shafts white; bill yellowish tipped with dusky; feet yellowish; eyes dark. *Male:* Similar but much duller. *Winter plumage:* Light *pearly gray* above; *head and under parts white;* a dusky space about the eye, and blackish crescent on the back part of the crown; bill and feet mostly dusky. *Young:* Upper parts similar to summer male; under parts white tinged with buff on throat and breast.

Length 7.5–8.8 inches; extent 14.5–16; wing 5–5.5; tail 2.4–2.5; tarsus .75–.8; bill .8–.9.

This species is of holarctic distribution, breeding far north and migrating southward to temperate regions in winter. In New York it is rather uncommon. There are about 20 records of its occurrence, 8 of these being from the interior, as follows:

Flushing, L. I. Aug. about 1870. Robert Lawrence, N. O. C. Bul. 5: 117
Shinnecock bay, L. I. May 14, 1883. Dutcher, Auk, 1: 33
" Sept. 26, 1885. G. E. Payne, Auk, 3: 436
Montauk, L. I. Sept. 1886. Dutcher, Auk, 3: 134
" ♂ ♀. Oct. 22, 1888. Dutcher, Auk, 3: 134
Quogue, L. I. Dutcher, Auk, 3: 134; Giraud, Birds of Long Island, p. 245
Amityville, L. I. Nov. 28, 1888. (Chichester). Dutcher
Montauk, L. I. May 20, 1892. 2 ♀. (Scott). "
Montauk Light, L. I. Oct. 21, 1894. ♀. "
" Apr. 30, 1898. (2 ♂, 7 ♀). (Miller). Dutcher
Montauk Point Light, L. I. Nov. 27, 1902. Braislin, Auk, 21: 289
" Sept. 24, 1903. Braislin, Birds of Long Island, p. 57
Oneida Lake, N. Y. Oct. 4, 1889. Bagg, Auk, 7: 230
Niagara river, N. Y. Oct. 1892. James Savage, Auk, 12: 313
Buffalo, N. Y. ♀. Sept. 26, 1894. " " "
South Buffalo, N. Y. Oct. 31, 1896. James Savage
" Nov. 1897. "
Keuka lake, Yates co., N. Y. James Flahive Collection
Auburn, N. Y. (William Hopkins). Bost. Soc. Nat. Hist. Proc. 1856. 5: 13
Fourth lake, Herkimer co. Sept. 25, 1904. ♀. (Robert McPhail). E. H. Eaton Collection

Lobipes lobatus (Linnaeus)

Northern Phalarope

Plate 20

Tringa lobata Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 148, 824
Lobipes hyperboreus DeKay. Zool. N. Y. 1844. pt 2, p. 269, fig. 203, 204
Phalaropus lobatus A. O. U. Check List. Ed. 2. 1895. No. 232

lobā'tus, Lat., lobed

Description. Bill short, slender, straight, compressed and pointed at the tip; legs short; tibia only slightly denuded; toes with scalloped membrane. *Female in summer:* Upper parts in general plumbeous, the back and scapulars with four *stripes of ocherous*, and the feathers of the back and wing coverts narrowly edged with white; *sides of the neck bright reddish chestnut;* throat and eyelids white; a white band in the wing formed by the white ends of the greater coverts; primaries blackish, the shafts white; tail dusky grayish, the outer feathers lighter and narrowly edged with whitish; upper tail coverts white and dusky; *under parts white, mixed with bluish gray on the breast and sides;* bill and feet black. *Male:* Showing similar pattern and colors, but much duller and the upper parts mixed with grayish brown; smaller than female. *Winter plumage: Upper parts light grayish*, the buffy stripes of summer replaced with whitish ones; *front and sides of head and neck, and under parts* mostly *white;* a dusky patch back of the eye, and the sides of neck washed with buffy where the red appears in summer.

Young: Upper parts blackish, edged with buffy, grayish on the back, scapulars and wing coverts; top of head and neck slaty; below white; sides of neck and breast tinged with light brownish; feet lighter.

Length 7–7.5 inches; extent 13.5; wing 4.15–4.5; tail 2; tarsus .78–.82; middle toe and claw .85; bill .8–.88. Smaller dimensions are of males.

The Northern, or Red-necked phalarope, is holarctic in distribution, breeding in high latitudes and migrating southward in winter to temperate and tropical regions. It is our commonest phalarope, occurring with considerable regularity both on the ocean and inland waters. New York specimens are as follows:

Rockaway, L. I. Aug. 24, 1874; Aug. 1875. Lawrence, Forest and Stream, 10: 235
Troy, N. Y. av. F. S. Webster
Keuka lake, N. Y. May 1874. Auburn List, p. 31
Owasco Lake, N. Y. (Several). June 1877. Auburn List, p. 31
Black river, Lewis co., N. Y. Sept. 6, 1877. Merriam, N. O. C. Bul. 3: 54
Booneville, N. Y. About " " "

Center Moriches, L. I. Aug. 20, 1879. Robert Lawrence, N. O. C. Bul. 5: 117
Flushing, L. I. Sept. 29, 1879. (C. A. Willets). Lawrence, N. O. C. Bul. 5: 117; Auk, 6: 135
Troy, N. Y. Sept. 4, 1881. T. B. Heimstreet
Westmoreland, N. Y. Early spring 1881. Bagg
Near Albany, N. Y. May 19, 1883. N. O. C. Bul. 8: 180, G. A. Lintner
South Oyster Bay, L. I. May 24, 1883. Dutcher, Auk, 1: 33
Fire Island Light, L. I. May 19, 1884. Dutcher, Auk, 3: 36
Onondaga lake, Syracuse, N. Y. Sept. 2, 4, 25, 1886. Green, Auk, 4: 73
Montauk Point Light, L. I. Sept. 3, 1886. Dutcher, N. O. C. Bul. 5: 117; Auk, 6: 135
" May 5, 1888. 2♀. " " "
" May 29, 1888. 3♂. " " "
" Aug. 13, 1888. 2. " " "
" Oct. 22, 1888. ♂. " " "
Buffalo, N. Y. Oct. 1, 1889; Sept. 1894. James Savage
Oneida Lake, N. Y. Sept. 21, 1889. Egbert Bagg
Thomasville Mills, Lake Ontario, Orleans co. Sept. 19, 1891. David Bruce
Montauk Point, L. I. May 1890. ♂. (Scott). Dutcher
" May 22, 1892. ♀. " "
" Aug. 26, 1892. (8). " "
" May 5, 1894. ♀. " "
" June 3, 1894. " "
" Aug. 27, 1894. (2). " "
Keuka lake, N. Y. May 16, 1895. ♂. C. F. Stone
Cayuga marshes, N. Y. May. About 1895. ♂, ♀. (Parker). E. H. Eaton Collection

Steganopus tricolor Vieillot

Wilson Phalarope

Plate 30

Steganopus tricolor Vieillot. Nouv. Dict. d'Hist. Nat. 1819. 32: 136
Holopodius wilsoni DeKay. Zool. N. Y. 1844. pt 2, p. 270, fig. 201–2
Phalaropus tricolor A. O. U. Check List. Ed. 2. 1895. No. 224

stega'nopus, Gr. στεγανόπους, webfoot; *tri'color*, Lat. *tres*, *tria*, three, and *color*, color

Description. Bill long, equaling tarsus, depressed, very slender, acute; legs long; tibia bare some distance; toes long, slender, fringed broadly and almost evenly. *Female in summer:* Lores, front and crown light ash turning to white on the back of the neck; throat, line over the eye and eyelids white; a velvety *black band extending from the region of the eye halfway down the sides of the neck, then giving way to rich purplish chestnut* or wine-red which continues down the sides of the back in narrowing stripes; a stripe of the same color on the scapulars; *upper parts in general bluish*

ash, paler on the rump; upper tail coverts and tail marbled white and grayish; *under parts white*, the foreneck and breast washed with vinaceous buff and the sides flushed with the same; bill and feet black; eyes brown. *Male:* Smaller; color pattern similar, but much duller than female, and browner above. *Winter plumage:* Above light grayish, the feathers edged narrowly with whitish; some scattered blackish feathers; lores, stripe on side of head, and whole under parts white. *Young before the winter molt:* Upper parts brownish black, the feathers margined with a rusty brown, resembling a Pectoral sandpiper; line over eye, upper tail coverts and under parts white, the breast tinged with rusty; feet yellowish.

Length 8.25–9.5 inches; extent 15–16; wing 4.75–5.32; tail 2.25; tarsus 1.33; middle toe and claw 1.12; bill 1.33. Smaller dimensions are of males. *Young:* Bill 1.1; tarsus 1.2.

The Wilson phalarope is a nearctic species, inhabiting the interior of the United States and Canada north to the Saskatchewan and Hudson bay, and wintering from Texas to Patagonia. New York lies out of the normal migration route of this species and it occurs only as an occasional transient as follows:

Buffalo, N. Y. Very rare. DeKay, Zool. N. Y. 1844. 2: 270
Long Island. Few occur. Giraud, Birds of Long Island. 1844. p. 247
South Bay, L. I. L. I. Hist. Soc. Col. (3 specimens)
Rockaway, L. I. Oct. 3, 1872. Lawrence, Forest and Stream, 10: 235
Long Island, N. Y. Oct. 10, 1874. N. T. Lawrence, Auk, 2: 273
Penn Yan, N. Y. (Gilbert). Birds Cent. N. Y., p. 30
East river, N. Y. Oct. 15, 1879. N. T. Lawrence, Auk, 2: 273
Murray, Orleans co., N. Y. Sept. 1882. David Bruce
Shinnecock bay, L. I. Aug. 20, 1883. Dutcher, Auk, 1: 33
Oneida Lake, N. Y. Oct. 6, 1883. (Barnum). Ralph & Bagg List, 112
Western New York. Oc. in fall. Langille, Our Birds in their Haunts. 1884
Atlanticville, Suffolk co. About Aug. 15, 1885. (G. W. Howell). Auk, 3: 436
Onondaga lake, N. Y. Sept. 2, 1886. C. P. Moxon
Moriches, L. I. June 1, 1887. Lawrence Collection, 3247
Shinnecock bay, L. I. Sept. 13, 15, 1887. Dutcher, Auk, 5: 177
Carmel, Putnam co., N. Y. About 1890. W. A. Mead
Seaford, L. I. Fall 1890. (Wilson). Dutcher, Long Island Notes
Ithaca, N. Y. Fall 1892. Juvenal. L. A. Fuertes Collection

Family RECURVIROSTRIDAE

Avocets

Bill lengthened, flattened, recurved and much attenuated and acute; legs very long, with hexagonal plates; front toes webbed; hind toes short and free; plumage thick and ducklike; wings rather short; tail short and square.

There are four or five species of avocets inhabiting the temperate regions, only one of which reaches North America. They are well adapted to wading and swimming, and when they get beyond their depth in water, continue on their course as if nothing had happened, in this respect being unlike all members of the order, with the exception of the phalaropes.

Recurvirostra americana Gmelin

American Avocet

Recurvirostra americana Gmelin. Syst. Nat. 1788. Ed. 1. 2: 693
DeKay. Zool. N. Y. pt 2, p. 266, fig. 227, 229
A. O. U. Check List. Ed. 2. 1895. No. 225

recurvirŏ'stra, Lat. *recurvus*, bent back or upward; *rostrum*, bill; *americā'na*, American

Description. *Breeding plumage:* Head and neck pale reddish brown or cinnamon fading to white below; back, lesser coverts and primaries black; rest of plumage white. *In winter and immature:* Similar, but head and neck white or grayish white. Bill recurved or bent upward, blackish; legs bluish; eyes dark.

Length 15.5–18 inches; extent 28–31; wing 8.75–10; tail 3.5; bill 3.75; tarsus 3.75.

American avocet. Recurvirostra americana Gmelin. From specimen in State Museum. ¼ nat. size

The American avocet, or Bluestocking, was formerly an occasional visitor to the shores of Long Island and the Great Lakes, but now is purely accidental or entirely absent. The last authentic specimens from the State were obtained about 50 years ago on Long Island. Specimens from this locality without definite data are found in the State Museum, the Ameri-

can Museum, and the Collection of the Long Island Historical Society [*see* Dutcher, Auk, 10: 272].

The bird is mostly an inhabitant of interior and western America from Texas to Saskatchewan, wintering from the gulf coast southward.

Family HIMANTOPODIDAE

Stilts

Body rather small, but the legs excessively lengthy; hind toe wanting; front toes semipalmate; bill slender, nearly straight, slightly curved upward, tapering, acute; wings long and pointed; plumage blackish and white.

There are seven or eight species of Stilts, inhabiting warm or temperate regions, but only one reaches the United States.

Coues says, "on the ground whether walking or wading, the bird moves gracefully, with measured steps; the long legs are much bent at each step (only at the joint, however), and planted firmly, perfectly straight; except under certain circumstances, as those Wilson narrates, there is nothing vacillating, feeble or unsteady, either in the attitudes or the movements of the birds. When feeding, the legs are bent backward with an acute angle at the heel joint to bring the body lower; the latter is tilted forward and downward over the center of equilibrium, where the feet rest, and the long neck and bill reach the rest of the distance to the ground."

Himantopus mexicanus (Müller)

Black-necked Stilt

Charadrius mexicanus Müller. Syst. Nat. Sup. 1776. p. 117
Himantopus nigricollis DeKay. Zool. N. Y. pt 2, p. 265, fig. 200
Himantopus mexicanus A. O. U. Check List. Ed. 2. 1895. No. 226

himăn'topus, Gr. ἱμαντόπους, strap-legged, crook-shanked; *mexicā'nus*, Lat., Mexican

Description. *Adult male:* Black and white, the back of head and neck, upper back, and wings, black; tail gray; front of head and neck, lower back, rump, under parts, a spot before the eye, and another behind

Black-necked stilt. Himantopus mexicanus (Müller). Long Island specimen, State Museum. About ¼ nat. size

it, white. *Female:* Browner above. *Immature:* The brown of the upper parts marked with whitish.

Length 13.5–15 inches; extent 26–28; wings 8.5–9; tail 3; bill 2; tarsus 4.15.

The Stilt, Longshanks, or Lawyer, is confined mostly to tropical, and interior or western austral America, rarely occurring at the present day north of Florida on the Atlantic coast, although it formerly bred as far north as New Jersey and possibly on Long Island. The latest New York specimens were taken 50 or 60 years ago on Long Island, some of which are now in the State Museum, the American Museum, and the collection of the Long Island Historical Society. Both this species and the Avocet were of regular occurrence on our coast in 1840 according to Colonel Pike and Giraud [*see also* Dutcher, Auk, 10:272].

Family **SCOLOPACIDAE**

Snipe etc.

The true Snipes have a long bill, in Tringae however scarcely longer than the head, and its terminal portion sensitive; in Scolopacinae the legs are of moderate length and the tibiae not so extensively bare as in Totaninae; the latter also have the terminal portion of the bill hard, and the outer and middle toes joined by a web at the base, and the plumage mottled; the former are more or less striped.

Scolopax rusticola Linnaeus

European Woodcock

This species is *larger* than the American woodcock and much *grayer* in general color. The *under parts are finely barred or waved with dusky.* Length 13.5 inches; wing 8; bill 3.25.

This palearctic species has been taken in Rhode Island, New Jersey and Pennsylvania. Lawrence records a specimen from the vicinity of New York which was brought in by a gunner on a North river ferryboat. It is only accidental in eastern North America but may yet be taken in New York.

Philohela minor (Gmelin)

American Woodcock

Plate 31

Scolopax minor Gmelin. Syst. Nat. 1788. Ed. 1. 2: 661
Rusticola minor DeKay. Zool. N. Y. 1844. pt 2, p. 257, fig. 231
Philohela minor A. O. U. Check List. Ed. 2. 1895. No. 228

philo'hela, Gr. φίλος, loving and ἕλος, bog; *minor*, Lat., smaller, i.e. than the European woodcock

Description. Head large; neck short; eyes large, set far back and high; bill very long, compressed, the upper mandible longer and the lower mandible fitted into it at the tip, its terminal portion corrugated, pitted, sensitive and voluntarily flexible and fingerlike; wings short and rounded, the first three primaries short, narrow and somewhat falciform; legs short, stout, feathered to the heel joint; toes entirely free; tail of 12 feathers; general build full and stocky. Upper parts intricately mottled and barred with rufous, buffy and black; the feathers edged with pale ashy, forming four broad stripes on the back and scapulars; front of head and sides of neck ashy washed with rufous; occiput black with three transverse bands of buffy; irregular line from bill to eye and another below the eye on sides of neck, black; eyelids buffy; under parts pale rufous, brighter on sides and under wing coverts; flight feathers ashy brown; tail feathers blackish tipped with ashy and their under surfaces with silvery white; under tail coverts also with white tips; bill light brown, pale at base; legs pale reddish or flesh color; iris brown.

Length ♂ 10–11, ♀ 11–12 inches; extent 17–19; wing 4.75–5.75; tail 2.2–2.5; bill 2.5–2.75; tarsus 1.2–1.4; middle toe and claw 1.5; weight, males 5–6 ounces; females 6–8 ounces, extra fat ones rarely 9 ounces.

Distribution. The Woodcock inhabits the eastern United States and Canada, north to Manitoba and southern Labrador, and westward to the plains, wintering in the southern half of its range. In New York it is a summer resident, and formerly nested commonly in every county of the State, but is now fast disappearing from the more inhabited districts on account of the incessant slaughter by gunners in the open season, and by telegraph wires at all seasons, the killing of its young by cats and other predatory animals, the draining of swamps, and the destruction of its favorite coverts. I have talked with gunners in western New York who killed as many as 180 brace of woodcock in one season 25 years ago, but

now have difficulty in securing 30 birds each fall; and I have little doubt that in the State as a whole we have no more than 1 Woodcock where there were 50 in 1860. Woodcock still breed sparingly in all parts of the State, and are fairly common on good grounds during a short period in October, when the northern birds are migrating, or, "coming in," as the sportsmen call it.

Migration. This species sometimes appears in southern New York as early as February 22, but usually arrives from the 10th to the 15th of March, and from one to two weeks later in the interior and northern districts. There are very few reliable data before me, most records of "first seen" being when nests with eggs were found. In the fall, northern woodcock arrive after the first sharp frosts in October, usually from the 1st to the 15th, and the last are seen from November 1st to 20th, although stragglers occasionally remain about warm springy places through December or even throughout the winter in the southern parts of the State.

Haunts and habits. The Woodcock is not by any means confined to swampy ground, but often seems to delight in wooded slopes and hilltops. Alder coverts along ponds and streams, rich bottom lands grown over with willow, soft maple, elder and dogwood, low-lying cornfields, hill slopes covered with low second growth of maple, hickory or oak, and the edges of wooded swamps are its favorite haunts. Thick coverts and a moist soil, well supplied with earth worms, are its delight. They do not thrive on "sour bottoms" or where the soil has been flooded so long that the worms are driven out. In upland coverts they often feed by searching under the leaves, or on the worms that come out at night, but also travel considerable distances at night to seek well known banquet grounds in the valley or along the streams. When camping on the uplands, and when journeying through the country at dusk, I have frequently seen woodcock darting past on their foraging excursions. They migrate and feed at night. During the day the Woodcock sits quietly amid its coverts, or stands sleepily at the edge of the swamp, or beside some path or opening in the woods, his head drawn down upon his "shoulders" and his bill pointing downward, appearing more like a ball of brown leaves attached to a slender stick, than

like a bird. If disturbed, he pops up, as if discharged from a catapult, to the tops of the bushes; then darts away in a horizontal course, and quickly drops again among the bushes. The Woodcock's flight is rapid and accompanied by a whistling, whirring sound, but not so resonant as that of the Grouse and Bobwhite. It lies well to the dog and when hunted rarely leaves the locality where it was startled. Thus the whole brood is often secured by the sportsman and none are left to repopulate the coverts. The woodcock's migratory habit has preserved it thus far from extermination, but it sorely needs the most efficient protection if it is to escape the fate of the Heath hen, Wild turkey, and Passenger pigeon.

Nest and eggs of woodcock. (From *Bird-Lore*). Photo by Tabor

Woodcock begin to breed from the 1st to the 10th of April, and the eggs are almost always laid before the 25th of that month. During the mating season and until the period of incubation is nearly finished, the cock performs his peculiar song and aerial evolutions during the early evening and often in the morning. Springing from the ground, he ascends in a spiral course, whistling or chippering or piping as he mounts in the air until a considerable hight is reached when he sweeps about in wide circles and descends again, uttering all the while a mellow and rapidly increasing chipper, or warble, until the ground is reached, when he lowers his head and cocks his tail and utters a harsh, nasal *pêênk*, or *blaík*, accompanied with an uncouth waving motion of the body. Then he looks about expectantly and if his mate does not appear, the serenade is repeated, often as late as 9 or 10 o'clock in the evening.

The Woodcock lays her eggs where there is a slight elevation of ground in the swamp, or in the midst of the woods. I have found the nest in Ontario county in dry oak and pine woods on hilltops at an elevation of 2000 feet, but usually the lowland woods are preferred. There is slight attempt at nest-building, the eggs being laid on the dry leaves, or a few dried grasses and bits of leaves drawn together for a bed. They are four in number, ovate in shape, of a buffy color spotted with reddish brown and purplish gray, and average 1.56 x 1.22 inches in dimensions. The young are covered with a rusty buff-colored down, marked above with deep chestnut, and follow their mother soon after hatching. Within two weeks they are able to fly a short distance, but usually escape their enemies by lying absolutely still among the brush and leaves. The old bird is deeply attached to her young and when they are disturbed flutters about the intruder uttering a pitiable whining sound and frantically endeavors to distract one's attention and lure him from the chicks. They also cling closely to their nests when incubating and will often allow themselves to be raised from the eggs with a stick or even by the hand rather than desert them. After a severe snowstorm in early April Mr Edward Reinecke of Buffalo found several nests of woodcock by tracking the hens over the snow and, noticing where they had sat down or scratched on the surface, he dug down and found the eggs buried under several inches of snow.

Gallinago delicata (Ord)

Wilson Snipe

Plate 32

Scolopax delicata Ord. Wilson's Ornithology. 1825. 9: 218
Scolopax wilsoni DeKay. Zool. N. Y. 1844. pt 2, p. 256
Gallinago delicata A. O. U. Check List. Ed. 2. 1895. No. 230

gallinā'go, Lat. (from *gallina*, a hen), henlike; *delicā'ta*, delicious

Description. Upper parts black, *striped and mottled with buffy whitish;* foreneck and *breast ocherous buff obscurely mottled with blackish;* throat and belly white; *sides* and under *wing coverts* and *axillars barred with black;* under tail coverts buffy marked with blackish; wings dusky, the coverts tipped or mottled with whitish, and outer edge of first primary white;

central *tail feathers black* with *a broad subterminal bar of rufous*, and tipped with whitish; outer tail feathers white, barred with blackish. Bill dusky or brownish, legs greenish olive; iris dark brown. Sexes similar, the female perhaps more ocherous on the breast and light markings.

Length 10.75–11.75 inches; extent 17.5–20; wing 4.9–5.2; tail 2.25; bill 2.3–2.7; tarsus 1.25; middle toe and claw 1.5; weight 4–5 ounces.

Field marks. The dark, striped back of the Snipe combined with its long bill (2.50 inches) and white belly can be seen by a quick eye as he springs from his grassy coverts in the swamp. His rapid zigzag flight and sharp, grating call of *scaipe, scaipe*, are also quite distinctive.

Distribution. The Wilson snipe breeds from Minnesota, Illinois, and southern New York north to Labrador and Hudson bay. In this State, however, it is neither a common nor regular breeder at the stations where its nest has been found, but would undoubtedly become a commoner breeder in such localities as the swamps of central New York and Lake Ontario if permanently relieved of spring shooting and disturbance of the nesting grounds. I have found it breeding at Springville, Canandaigua Outlet in Ontario county, and Bergen swamp; Mr C. F. Stone has taken its eggs at Branchport on two occasions; Mr E. R. Tabor found its downy young at Meridian; and reports of its nesting in Chautauqua, Genesee, Orleans, Onondaga, Oswego and St Lawrence counties have come to my attention. Throughout New York the Snipe is found as a regular migrant while passing to and from its more northern breeding grounds, being so common on the more extensive swamps of western New York, that 140 birds have been bagged by two guns in a single day. But this is an exceptional occurrence, and such reckless slaughter is suicidal to the interests of true sport, and has already resulted in a woeful depletion in the ranks of this fine game bird.

Migration. In the warmer parts of the State, the Snipe begins to arrive from the south as early as March 12th to 16th, if the spring is advanced, and rarely later than March 25th, and from one to two weeks later in the northern counties. They are commonest during the middle and later part of April in the swamps of Lake Ontario and the central lake country, and mostly pass on to the northward from the first to the tenth of May. In the

fall there is a noticeable movement of northern birds from the 1st to the 20th of September in western New York, and September 10th to 30th on Long Island. They remain in full force if undisturbed throughout October and well into November, the majority disappearing with the freezing of the swamps, although stragglers are found throughout the winter around warm springs in western New York, and on the tidal marshes of the coastal district.

Haunts and habits. The Wilson snipe, "Jack" snipe, or "English" snipe as gunners often call it, is a bird of the swamps, marshes, and boggy shores, but not in the dense flags and sedges where the rails hold sway, nor in the thick coverts which are the woodcock's delight. This bird prefers a sparse growth of grass, weeds or bushes where it can walk easily about thrusting and probing in the soft oozy soil for worms, grubs, soft roots and seeds which constitute its favorite food. When no enemy is near he walks nimbly, carrying the head and body erect with the bill pointing well downward, but often assumes more the attitude of a sandpiper and gleans from the surface especially when foraging along the shore of a lake or stream as he often does in the dusk of evening. When his foes appear he crouches so motionless that it is impossible to distinguish him among the grasses, and when too closely pressed springs suddenly into the air with a sharp grating call and makes rapidly off in a "rail-fence" course not far above the ground until well out of danger, when he mounts high in the air and circles about for a few minutes finally to pitch headlong into the swamp again, perhaps into the same position from which he was driven. In April and early May when snipe are nesting their curious aerial performance is one of the most interesting sounds of the marsh lands. It is usually heard in the evening or on cloudy days. The bird mounts high in the air, often five or six hundred feet, and circles around the swamp, occasionally sweeping obliquely downward with a quivering motion of the wings, producing a weird tremulous crescendo whistle, resembling somewhat the distant or muffled bleating of a kid, or the sound of an old-fashioned fan-mill, whence the notes have been known as the "bleating" or "winnowing" of the Snipe. The sound is evidently produced by air rushing

through the feathers of the rapidly vibrating wings, similarly to the winnowing of pigeons' wings as heard about the dovecote. When this winnowing of the Snipe is heard in the hush of a spring evening and without warning, directly above one's head, the effect is quite startling and impressive. In the breeding season the Snipe also has a mating call delivered as the bird flies in a direct line over the swamp at a low elevation, consisting of a succession of curious notes resembling the syllables "*kuk, kuk, kuk, kuk, kuk*" [Brewster]. I have heard this note often on the marshes of western New York, but have never observed the bird alight on a tree, as Brewster states, after uttering the call, but have seen it perch on a hummock or log after the performance.

The Wilson snipe lays her eggs, four in number, in the midst of the grassy swamp on a slight hummock, or a tussock of grass, in a nest composed of a few straws, leaves, or mosses. They are large, about 1.6 x 1.18 inches, of a clay color or greenish olive, with blotches of chocolate and obscure shell markings more heavy about the larger end. The chicks are covered with a dark down, striped with buffy.

Macrorhamphus griseus (Gmelin)

Dowitcher

Plates 33, 34

Scolopax grisea Gmelin. Syst. Nat. 1788. Ed. 1. pt 2, p. 658
Scolopax noveboracensis DeKay. Zool. N. Y. 1844. pt 2, p. 255
Macrorhamphus griseus A. O. U. Check List. Ed. 2. 1895. No. 231

macrorhăm'phus, Gr. μακρός, long; ῥάμφος, beak; *grī'seus*, Lat., gray

Description. *Summer plumage:* Upper parts blackish edged, mottled or barred with dull buffy or cinnamon; *rump white*, V-marked with blackish; tail and its upper coverts barred with white and dusky; *under parts pale cinnamon* becoming white on belly, mottled and barred with blackish, except on belly; bill and legs greenish dusky. *Winter plumage: Brownish gray above*, the rump and tail as in summer; throat and breast pale ashy; *belly white*, sides barred with black.

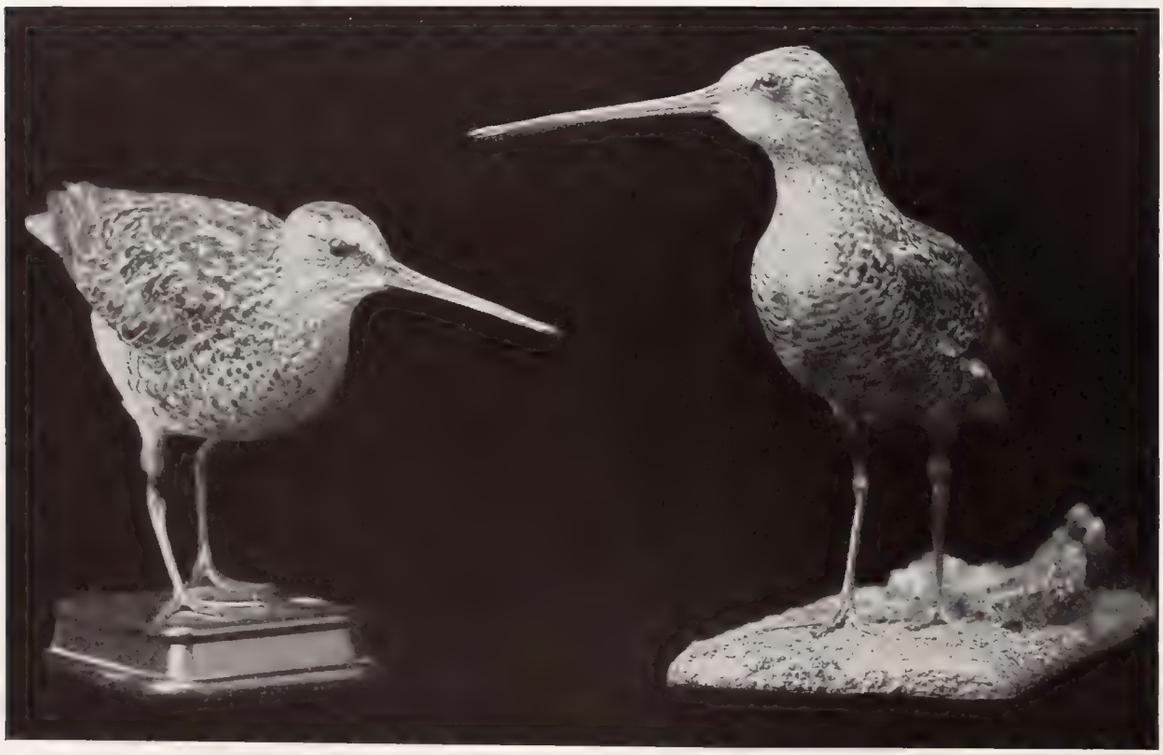
Length 10–11 inches; extent 17.5–19; wing 5.25–5.9; bill 2.05–2.55; tarsus 1.3–1.4; middle toe and claw 1.2.

Field marks. The Dowitcher resembles the Wilson snipe in size and shape, but has a *white rump* and is *less striped* on the back and *more buffy*

or rufous on the under parts. The white rump and barred tail combined with its size and the length of its bill serve to distinguish the Dowitcher from other shore birds. It is more gregarious than the Wilson snipe and also more of a beach bird.

Distribution and migration. The Dowitcher breeds in the arctic region of eastern North America and passes the winter from the gulf coast to South America. In New York it is chiefly confined to the shores of Long Island where it was formerly an abundant migrant, passing northward from the 25th of April, or the 9th of May, to the 30th of May, or the 12th of June, and returning to its winter quarters from July 12th or 20th, to September 8th or 15th.

It is now much less common than it was 20 years ago, due mostly to spring shooting and reckless slaughter by the gunners, who often destroy entire flocks that have bunched among their decoys, without leaving a



Dowitcher. Macrorhamphus griseus (Gmelin) Long-billed dowitcher. M. scolopaceus (Say)
From specimens in State Museum and Forest, Fish and Game Commission collections. ⅔ nat. size

single pair to return to the breeding grounds. On the inland waters of the State this bird is decidedly uncommon, but is taken occasionally along the Great Lakes and rarely on our rivers and smaller lakes, in May and early September.

The Dowitcher ("Deutscher" or "German" snipe to distinguish it from the "English" snipe), also called Red-breasted snipe, Robin snipe, Brown-back, Gray-back, and Quail snipe, is fully as gregarious as the Yellow-legs and often occurs in dense bunches over the bars and mud flats of Long Island. As they circle about the marshes, and often as they take wing when startled, they utter a tremulous whistle resembling considerably the notes of the Yellow-legs. Their flesh is less delicious than that of the Wilson snipe, and they also bear less resemblance to the true game birds since they are hunted from blinds by the use of decoys, and do not scatter or lie in cover before dogs like the common Snipe. The capture of dowitchers is more like slaughter and less like genuine sportsmanship.

Macrorhamphus scolopaceus (Say)

Long-billed Dowitcher

Limosa scolopacea Say. Long's Expedition. 1823. 2: 170
Macrorhamphus scolopaceus A. O. U. Check List. Ed. 2. 1895. No. 232

scolopā'ceus, Lat., snipelike

Description. Very similar to the preceding species, but slightly *larger*, with *longer bill*. The under parts are also more rufous in the summer plumage, with the sides more heavily barred. In winter plumage the size and bill are the only distinguishing features.

Length 10.75–12.5 inches; extent 18–20.5; wing 5.45–6.5; bill 2.2–3.25; tarsus 1.3; middle toe and claw 1.2.

This species is chiefly confined to the arctic coast west of Hudson bay in the breeding season, and migrates mostly through the Mississippi valley and along the Pacific coast. On our shores, however, it is a regular migrant, according to Lawrence arriving at least a month earlier than M. griseus, in the spring often appearing by the 20th of March and passing northward in April. Mr Dutcher's Notes furnish dates ranging from July 16 to October

15, and November 30. Mr Savage records a specimen from Strawberry island, Niagara river, October 1892, but no others have been taken on our inland waters, as far as I know, although western New York lies nearer than Long Island to the usual migration route of the species.

Micropalama himantopus (Bonaparte)

Stilt Sandpiper

Plates 33, 34

Tringa himantopus Bonaparte. Ann. Lyc. N. Y. 1826. 2: 157
Hemipalma himantopus DeKay. Zool. N. Y. pt 2, p. 235, fig. 196
Micropalama himantopus A. O. U. Check List. Ed. 2. 1895. No. 233

micropa'lama, Gr. μικρός, small, παλάμη, a web; *himan'topus*, Gr. ὑμαντόπους, strap-legged, or crook-shanked

Description. Legs long and slender; toes webbed at base; bill long, slender, slightly curved. *Summer:* Upper parts black, margined and streaked with grayish and buffy or rufous; upper tail coverts barred with white and dusky; tail mingled white and ashy; wings grayish, primaries changing to fuscous and the secondaries edged with white; *ear coverts* and the *side* and *rear margins of the crown rufous;* under parts white, often washed with reddish, *extensively barred with fuscous;* bill and legs dusky greenish. *Winter:* Upper parts ashy gray, sometimes with traces of black and buff; under parts white, indistinctly streaked on the neck and breast with dusky and barred wth black on the sides; tail and its upper coverts white, the former margined and the latter barred with ashy. *Young:* Similar, the upper parts usually dusky margined with buffy white; legs greenish yellow.

Length 8–9 inches; extent 16–17; wing 5–5.25; tail 2.25; bill 1.5–1.75; tarsus 1.6–1.75; middle toe and claw 1; tibia bare 1.

The Stilt sandpiper inhabits eastern America, breeding in the arctic regions and migrating in winter to the West Indies and South America. In New York this species is not as rare as has been generally supposed, probably being overlooked by gunners from its resemblance in fall to the Yellow-legs. Lawrence [N. O. C. Bul. 3:148] mentions it as common on the south side of Long Island from July to September. Mr Dutcher's Long Island Notes record about 150 specimens shot between 1882 and 1893 and many others seen, often in flocks ranging from 11–60 individuals, the dates ranging from July 12 to October 10. In the spring it is less common, or

entirely absent, his only record being May 18, 1885. Mr Todd, in his Birds of Erie, Pa., mentions 17 specimens taken on Lake Erie between August 7-September 14, in the years 1893, 1895 and 1901. Few definite records from the interior of New York have come to my attention. One was taken at Penn Yan in October 1875 [Birds Cent. N. Y. p. 31], two in Saratoga county in 1893 [A. S. Brower], two near Buffalo, September 16, 1893 [Savage, Auk, 12:313] and one on Seneca river October 10, 1907 [Foster Parker].

Like the Yellow-legs, this species often wades in shallow water while feeding, when flushed it "darts swiftly away with a sharp tweet, tweet." [Gosse]

Tringa canutus Linnaeus

Knot

Plates 33, 34

Tringa canutus Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 149
DeKay. Zool. N. Y. 1844. pt 2, p. 243, fig. 194, 218
A. O. U. Check List. Ed. 2. 1895. No. 234

trĭ'nga, Lat., sandpiper; *canū'tus*, pertaining to King Canute who is supposed to have been very fond of this bird

Description. A large stout sandpiper; bill longer than tarsus, straight, flattened and enlarged at tip; tibia bare about half the length of tarsus; tail nearly even. *Summer:* Upper parts brownish black, the feathers broadly edged and tipped with grayish white and rufous; tail ashy gray; *rump* and *upper tail coverts white barred with dusky white;* wings gray, primaries dusky; line over the eye and *under parts* in general *rufous* slightly marked with blackish on the sides; flanks and under tail coverts whitish marked with dusky; bill and legs greenish black. *Winter: Upper parts gray;* upper tail coverts white barred with dusky; *under parts white* marked with dusky on the breast and sides. *Immature:* Upper parts dark ash, feathers tipped with whitish, with a subterminal edging of blackish; under parts white, marked on the breast and sides with blackish.

Length 10–11 inches; extent 20–21; wing 6.5–6.75; tail 2.7; bill 1.3–1.4; tarsus 1.2; middle toe 1, tibia bare .6.

The Knot, Red-breasted sandpiper, Robin snipe, or Gray-back, breeds in the arctic regions of both hemispheres and migrates along our coast and inland waters, wintering from the gulf coast to South America. It is one of the best known beach birds on the south coast of Long Island, but like all the shore birds

is much less common than formerly. Although it appears in considerable numbers during the spring migrations, between the 15th of May and the 10th of June, it is far more common in the fall, arriving from the north July 15th to the 30th, and passing southward from the 10th to the 30th of October. There are few records comparatively, from the interior of the State. Mr Flahive has collected it near Penn Yan, Mr Bruce several on the shore of Lake Ontario, Mr Heimstreet one in May and one in September near Troy, Messrs Reinecke and Savage a few near Buffalo, and Mr Bagg reports it from Oneida lake. The dates for the inland records range from August 20th to October 15th. Mr Todd also records several specimens from Erie, Pa., dates ranging from August 27th to September 17th.

Knots feed both along the beach and the mud flats, often probing like other snipes for the small insects and crustaceans which are their principal food. Their note is a soft *wah-quoit*, usually heard when the birds are coming to the decoys, or a diminutive *honk*. They often bunch so closely like the dowitchers that the whole flock is sometimes destroyed while alighting among the decoys [Mackay, Auk, 1893. 10: 25–35].

Arquatella maritima (Brünnich)

Purple Sandpiper

Plate 34

Tringa maritima Brünnich. Orn. Borealis. 1764. p. 54
DeKay. Zool. N. Y. 1844. pt 2, p. 237, fig. 98
A. O. U. Check List. Ed. 2. 1895. No. 235

arquatĕl'la, Lat. dim. of *arquata*, *arcuata*, bent or bowed; *marĭ'tima*, Lat., maritime

Description. *Summer:* Upper parts varied with black, chestnut, buff, and whitish; under parts white streaked with dusky on the breast and clouded with dusky on the sides. *Winter:* Upper parts ashy or dusky gray, the feathers slightly margined with lighter and often with purplish reflections; wing coverts and inner secondaries edged with white; rump and middle tail feathers blackish; outer tail feathers ashy gray; lower neck, breast, and sides beneath the wings ashy; rest of under parts white; legs yellow or orange; bill yellow at base, greenish black toward the tip.

The Purple sandpiper, Rock sandpiper, or Winter snipe, is holarctic in distribution, breeding in the arctic regions and often wintering in high latitudes, but migrating regularly to the Middle States and casually to Florida. Though principally a maritime species, it occurs rarely on the Great Lakes and other inland waters. It prefers a rugged coast where the rocks covered with seaweed are exposed at low tide furnishing a bountiful supply of small aquatic animals which are its favorite food.

In Mr Dutcher's Long Island Notes we find about 25 records of this species on Long Island in the years 1880–93, the dates ranging from October 31st to March 5th. The number taken on each date varies from one to eight [*see also* Auk, 5: 178]. Mr Lawrence also records it from Rockaway, L. I., [Forest and Stream, 10: 235; *see also*, Berier N. O. C. Bul. 6: 126], Dr Braislin from Great South bay, L. I., November 23, 1899 [Auk, 19: 146], Mr Flahive from Seneca lake [Birds of Cen. N. Y. p. 32], Mr Bruce from Lake Ontario in the spring of 1883, Mr Burtch from Branchport, N. Y., September 14, 17, 1904, and Mr Webster from the Hudson, near Troy. It has also been taken at Toronto, Ont., November 3, 1900 [Ames, Auk, 18: 107], and in Ohio [Wheaton, Birds of Ohio, p. 476].

Pisobia maculata (Vieillot)

(Actodromas maculata on plate)

Pectoral Sandpiper

Plate 35

Tringa maculata Vieillot. Nouv. Dict. d'Hist. Nat. 1819. 34: 465
Tringa pectoralis DeKay. Zool. N. Y. 1844. pt 2, p. 242, fig. 193
Tringa maculata A. O. U. Check List. Ed. 2. 1895. No. 239

maculā'ta, Lat., spotted

Description. Bill nearly straight, about as long as head; tibia bare for a space about two thirds of the length of tarsus; tarsus equal to middle toe; *jugulum and breast conspicuously streaked;* tail doubly emarginate, central feathers longest. *Summer:* Upper parts black broadly margined with ocherous buff; rump and central tail coverts black; lateral tail coverts mostly white; primaries fuscous, the shaft of the outer one white; lateral tail feathers brownish gray slightly tipped and margined with white; jugulum and *breast streaked with dusky and dingy buff;* throat and belly white; bill

and legs dusky greenish, or ochery. *Winter:* Similar, but the ocherous buff of the upper parts largely replaced by rufous and whitish. *Young:* Similar, but less brightly marked.

Length 8–9.5 inches; extent 15–18; wing 4.75–5.7; tail 2.1–2.4; lengthening of central tail feathers about .35; tarsus 1–1.1; bill 1.1–1.2. The male is decidedly the larger.

This is the largest of our sandpipers of this genus with dusky and buff streaked breast and buffy or rufous edgings of the black feathers. Its breast is also more heavily streaked and its central tail feathers more elongated and pointed. Its note also which gives it the name of Krieker or Kreeker, is distinctive.

The Pectoral sandpiper, Grass snipe, or Kreeker, is a common migrant on all suitable marshes and mud flats in the State. It is more often found in meadows and flats with scattered cover than our other sandpipers, much resembling the Wilson snipe in this respect. Its grating whistle and habit of crouching in the grass and springing singly with zigzag flight when approached, also remind one of that bird. Its flesh compares quite favorably in flavor with that of the Snipe, and it is the smallest of our shore birds which I could consent to regard as legitimate game for the sportsman.

As might be expected from the habits of this bird, it is more generally distributed in the interior than the species which frequent the bars and bare shores, and is a common fall migrant along our lakes and rivers. In the spring it makes its appearance from the 22d of March to the 10th of April and is sometimes seen as late as the 26th of May. In the fall it is much more common, arriving from the 15th to the 30th of July, usually commonest during the month of September, and passes southward from the 20th of October to the 10th of November, stragglers sometimes occurring till the last of that month. It winters in the West Indies and South America and breeds in the arctic regions. The male inflates its throat and breast in the breeding season and utters a deep, resonant note [Nelson].

Pisobia fuscicollis (Vieillot)

(Actodromas fuscicollis on plate)

White-rumped Sandpiper

Plate 35

Tringa fuscicollis Vieillot. Nouv. Dict. d'Hist. Nat. 1819 34: 461
Tringa schinzi DeKay. Zool. N. Y. 1844. pt 2, p. 241, fig. 191
Tringa fuscicollis A. O. U. Check List. Ed. 2. 1895. No. 240

fuscicŏl'lis, Lat, *fuscus*, dusky, and *collum*, neck

Description. A small sandpiper with the general appearance of A. maculata, but smaller and the *upper tail coverts white*, and the edgings of the upper parts more rufous, and the sides more distinctly streaked. *Winter plumage:* Upper parts plain ashy or *brownish gray*, often showing patches of the black and rufous of the summer plumage. *Young:* Resemble summer adults, but less distinctly marked, and the edgings of the upper feathers more rusty and whitish.

Length 6.75–8 inches; extent 15–16.5; wing 4.85–5; tail 1.8–1.9; tarsus .95–1; bill .9–1.

The White-rumped, Bonaparte, or Schinz sandpiper is a fairly common migrant in the fall on the coast of Long Island, arriving from July 4th to August 15th, and disappearing from the 1st to the 30th of October. On inland lakes and rivers it is less common, though a regular migrant in western New York. Eighteen specimens from the central lakes were taken on dates ranging from September 20th to November 4th; several from Lake Ontario between September 10 and October 16; one from Putnam county in October 1889 [Meade]; one from Albany county, October 25, 1884 [Parks]; one from Seneca river, October 13, 1906 [Fuertes]. Todd in his Birds of Erie, Pa., records a number of specimens, the dates ranging from August 29 to October 23, and two were taken on June 4th, 1875, by Mr Sennett, which is the only spring record that I have seen for the vicinity of New York State.

This is a species of eastern America breeding within the arctic circle, and wintering from the West Indies to South America and the Falkland islands. It resembles the Pectoral sandpiper in habits, but is more often found on the sandy shore, in this respect and in the plain gray of its winter plumage and in the white of its rump suggesting a diminutive Knot. It is more gentle, however, and often allows one to approach within a few feet, but when startled dashes swiftly away with a sharp *weet, weet*.

Pisobia cooperi (Baird)

Cooper Sandpiper

Similar to P. fuscicollis in color but ground-color of upper parts brownish gray, with only the least trace of ocherous on some of the scapulars, and upper tail coverts conspicuously varied with broad V-shaped marks of grayish dusky. Length 9.5 inches; wing 5.8; culmen 1.25; tarsus 1.2.

A single specimen of this bird was taken on Long Island, May 24, 1833, and is now in the Smithsonian Collection, United States National Museum. As no further specimens have appeared, it is believed that it may be a hybrid, or abnormal example of P. maculata.

Pisobia bairdi (Coues)

(Actodromas bairdi on plate)

Baird Sandpiper

Plate 35

Actodromas bairdi Coues. Acad. Nat. Sci. Phila. Proc. 1861. p. 194
Tringa bairdii A. O. U. Check List. Ed. 2. 1895. No. 241

bairdi, in honor of Spencer F. Baird

Description. Resembles A. maculata but *smaller* and the upper parts more fuscous and pale buff than black and ocherous buff, the *jugulum and breast less heavily streaked.* In winter the upper parts more buffy grayish brown with dusky centers and rounded whitish tips. Young of the first winter closely resemble young of A. fuscicollis: but the breast is tinged with buffy and upper parts paler; rump not white.

Length 7–7.6 inches; extent 15–15.6; wing 4.5–4.85; tail 2.25; tarsus .9–1; bill .9–1. Smaller than the smallest maculata.

The Baird sandpiper is a fairly common transient on the shores of the Great Lakes and the central chain, and is not rare on Long Island. It is a nearctic species, breeding in the arctic region and migrating through the interior of North America to Chili and Patagonia. It was overlooked by the early ornithologists, and can be recognized with certainty only when collected and carefully examined. The migration dates are as follows:

Rockaway, L. I.	(2 spec.).	Sept. 1872.	Lawrence, Forest and Stream, 10: 235
"	(1 spec.).	Aug. 26, 1873.	" "
"	(1 spec.).	Sept. 20, 1874.	" "

Long Island, N. Y. 1882. N. O. C. Bul. 7: 133
" 1885. Auk, 2: 273
Fair Haven, Cayuga co., N. Y. O. & O. 1882. 7: 133
Montauk, L. I. Sept. 20, 1880. Daniel E. Moran, N. O. C. Bul. 7: 60
Far Rockaway, L. I. Aug. 1882. Lawrence, Auk, 2: 273

Locust Grove, Lewis co., N. Y. Aug. 11, 1885. H. W. Henshaw, Auk, 2: 384
Mt Sinai harbor, L. I. ♂ and ♀. Sept. 2, 1887. (Helme). Dutcher
Onondaga lake, N. Y. Aug. 27, 1888. Morris M. Green, Auk, 6: 68
Moriches, L. I. Aug. 26, 1890. (Lewis). Dutcher
Seaside Park, L. I. Sept. 29, 1894. H. H. Taylor, Auk, 12: 179
Shinnecock bay, L. I. Oct. 31, 1894. Braislin, Auk, 16: 191
Easthampton, L. I. Sept. 17, 1895. Vaughan, Auk, 13: 80
Waterport, Orleans co., N. Y. Sept. 3, 1895. Posson, Auk, 16: 194
Lakeside Park, Orleans co. Aug. 20, 1898; Sept. 8, 1898; Sept. 16, 1898. Posson, Auk, 16: 194
Canandaigua, N. Y. ♂. Nov. 20, 1895. E. H. Eaton
" 2 ♂. Oct. 6, 1900. "
Oneida Lake, N. Y. Sept. 4, 1897. Bagg, Auk, 17: 178
Verona Beach. Sept. 5, 1899. " "
Lake Ontario, Orleans co., N. Y. Sept. 8, 1898; Oct. 18, 1899. David Bruce
Montauk, L. I. Aug. 14–17, 1907. (5). Braislin, Birds of Long Island, p. 60
Rye Beach, N. H. Aug. 26, 1880. (2 spec.). Henry M. Spelman, N. O. C. Bul. 6: 61
New Haven, Conn. Oct. 28, 1887; Oct. 19, 1889, ♂. Woodruff, Auk, 7: 89
Erie, Pa. Sept. 5–29, 1900. "Moderately common." Todd, p. 540
" Aug. 24, 1892; Sept. 16, 1893; Sept. 1, 7, 1894; Oct. 5, 1894; Oct. 3, 1895; Sept. 11, 1897; Aug. 22, 1902; Sept. 1, 5, 1902. (Bacon). Todd, p. 540

Pisobia minutilla (Vieillot)

(Actodromas minutilla on plate)

Least Sandpiper

Plate 35

Tringa minutilla Vieillot. Nouv. Dict. d'Hist. Nat. 1819. 34: 452
Tringa pusilla DeKay. Zool. N. Y. 1844. pt 2, p. 244, fig. 207, 208
Tringa minutilla A. O. U. Check List. Ed. 2. 1895. No. 242

minutil'la, Lat. diminutive of *minutus*, small

Description. *Our smallest sandpiper*, very similar to the Pectoral sandpiper in color, but brighter on the back in summer and less heavily streaked on the breast; in winter not so bright, the upper parts being plain brownish gray with dusky shaft streaks.

Length 5–6.75 inches; extent 11; wing 3.5–3.75; tail 1.75–2; tarsus .75; bill .75–.9.

The Least sandpiper, Little peep, or Oxeye, is a common migrant along our coast and inland waters. It contests with the Semipalmated sandpiper the place for greatest abundance among our shore birds, at least along the Long Island coast. On our inland lakes and rivers perhaps the Yellow-legs,

Pectoral sandpiper, and Red-backed sandpiper, are fully as abundant during the fall migration. In the spring it appears on Long Island from the 20th to the 30th of April and departs for the north from the 26th of May to the 12th of June. Return migration begins as early as the 4th of July and is well advanced by the 1st of August, the last birds departing from the 20th of September to the 7th of October. In western New York it arrives later in the spring, like other species of arctic shore birds, usually appearing for only a few days late in April, or in May, while hurrying northward. Fall dates range from July 20th to September 30th.

This species like the Pectoral sandpiper frequents both the sandy shore, mud flats and the grassy meadows, and is often called the Meadow oxeye by the Long Island gunners. Where it is not persecuted by hunters I have often seen it so unsuspicious that one was quite unable to "walk it up," the little fellows trotting along in front of the observer and gleaning, or probing, industriously for insects on every side. When flushed it darts away with characteristic snipelike flight, sometimes to alight within a short distance, at others to leave the locality entirely, uttering its mellow *peep*, *peep*, or *peet*, *peet*. Some consider the little Sand-peeps as legitimate game and shoot them by the dozens to be made into "peep-pies" which are famous delicacies in many localities along the coast, but for my part, after associating with the Little sandpipers, I am more content to eat chicken pies than to think how dozens of these harmless, interesting birds have been sacrificed for a single meal.

This species breeds from the Gulf of St Lawrence to the arctic regions, and winters from the gulf coast to South America.

Pelidna alpina alpina Linnaeus

Dunlin

Tringa alpina Linnaeus. Syst. Nat. Ed. 10. 1858. 1: 149
A. O. U. Check List. Ed. 2. 1895. No. (243)

pelīd'na, Gr. πελιδνός, livid; *alpī'na*, Lat., alpine

Description. *Smaller* than subspecies pacifica. *Bill shorter;* tarsus about equal to middle toe and claw. In summer upper parts less brightly colored; and the blackish belly not strongly contrasted with the speckled or grayish breast. Length about 8 inches; bill, average 1.4; tarsus and middle toe 1.75.

This palearctic subspecies is of accidental occurrence in Greenland, Hudson bay, Washington, D. C., and Long Island. The single specimen from this State was taken on Shinnecock bay, L. I., September 15, 1892, and identified by Mr F. M. Chapman [*see* Young, Auk, 10:78].

Pelidna alpina sakhalina (Vieillot)

Red-backed Sandpiper

Plates 33, 34

Pelidna pacifica Coues. Acad. Nat. Sci. Phila. Proc. 1861. p. 189
Tringa cinclus DeKay. Zool. N. Y. 1844. pt 2, p. 240, fig. 192
Tringa alpina pacifica A. O. U. Check List. 1895. No. 152

Description. Bill slightly decurved toward the end, depressed, with slightly widened and sensitive tip; tarsus longer than middle toe and claw. *Summer:* Above, *bright rusty* or tawny, streaked or spotted with blackish; *belly covered* with a large patch of black, remainder of under parts white or grayish white, slightly marked on the breast and sides with dusky; tail and wings ashy gray; primaries dusky with light shafts; greater wing coverts tipped with white; bill and feet blackish. *Winter: Plain brownish gray above and white below* varied on the breast and sides with grayish. *Young:* Similar, but edged with rusty above, and streaked with dusky below.

Length 8–9.25 inches; wing 4.5–5; tail 2–2.35; bill 1.5–1.75; tarsus and middle toe 2.

Distribution and migration. This subspecies breeds in arctic America and winters from the gulf coast to South America. It is a common migrant on the salt marshes, beaches and mud flats of our coast, but is much more common in the fall. It arrives in the spring from the 1st to the 15th of April, and departs for the north from the 20th of May to the 6th of June. In the fall it arrives much later than our other common shore birds, usually appearing from the 1st to the 20th of September, is common during the first two weeks of October, and usually departs for the south from the 20th of October to the 15th of November, but is sometimes observed on the tide-washed flats throughout the winter. In the interior of New York it is also common in the fall along the Great Lakes and the marshes of the central lake country, appearing from the 20th of September to the 10th of October, sometimes arriving in great flocks with the first cold weather in October, and is often taken as late as the middle of November. In the spring it is a rare bird in western New York, but is sometimes observed between April 20th and May 25th.

The Red-backed sandpiper, Dunlin, Black-bellied sandpiper, Blackheart, Winter snipe or Purre, is well known to the bay men of Long Island. It usually occurs in flocks, sometimes of hundreds of individuals, which sweep along the coast or over the marshes like clouds, now showing the glistening white of their under parts, and now their leaden backs, as they swiftly wheel to come up the wind and alight on the muddy flats, to scatter immediately in search of the small worms, crustaceans, and insects which are hidden among the grasses or seaweed. On such occasions they keep up a contented, peeping chatter. When frightened, or flying, they utter a hoarse, grating note.

Erolia ferruginea (Brünnich)

Curlew Sandpiper

Tringa ferruginea Brünnich. Orn. Borealis. 1764. p. 53
Tringa subarquata DeKay. Zool. N. Y. 1844. pt 2, p. 239, fig. 213
Tringa ferruginea A. O. U. Check List. Ed. 2. 1895. No. 244

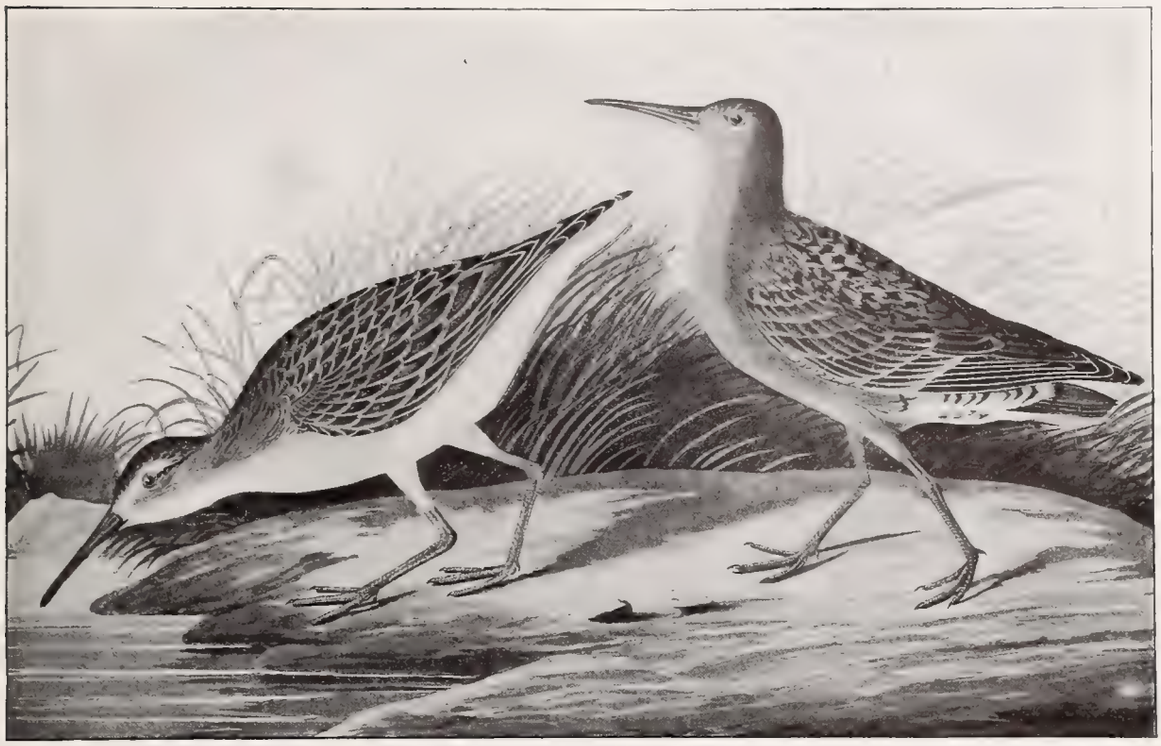
ero'lia, name given by Vieillot, meaning unknown to me; *ferrugĭ'nea*, Lat., rusty or reddish

Description. *Bill decurved beyond* the *middle*, slightly widened at the tip; tarsus longer than middle toe and claw. *Summer:* Upper parts rusty and blackish; *under parts cinnamon-rufous* or chestnut-red, slightly barred with dusky on the flanks and belly; *tail coverts white* barred with black. *Winter:* Upper parts ashy brown with dusky shaft streaks; under parts and upper tail coverts white, the breast streaked with gray.

Length 7–9 inches; wing 4.8–5.2; tarsus 1.2; tibia bare .7; bill 1.4–1.6.

This palearctic species is of rare occurrence in America. Audubon mentions a specimen from Long Island, and Giraud states that Mr Bell obtained seven or eight specimens in Fulton Market, New York, and mentions two or three others obtained there—"all of which were procured on the ever productive shores of Long Island." In Mr Dutcher's Collection there is a female taken May 24, 1883, on Shinnecock bay, L. I. [Auk, 1: 32–33], and another presumably from Long Island, which was sent to Mr Dutcher by mail, June 9, 1891.

The Curlew sandpiper associates with dunlins on the shores and mud flats, and in appearance resembles a diminutive Knot with a long decurved bill [Seebohm].



Curlew sandpiper. Erolia ferruginea (Brünnich). From Audubon, *Birds of America.* About $\frac{2}{3}$ nat. size

Ereunetes pusillus (Linnaeus)

Semipalmated Sandpiper

Plate 35

Tringa pusilla Linnaeus. Syst. Nat. Ed. 12. 1766. 1: 252
Heteropoda semipalmata DeKay. Zool. N. Y. 1844. pt 2, p. 236, fig. 195
Ereunetes pusilla A. O. U. Check List. Ed. 2. 1895. No. 246

ereunē'tes, Gr. ἐρευνητής, searcher or prober; *pusĭl'lus*, Lat. small

Description. *Toes with basal membrane*, that between the middle and outer extending to the second joint, and all the toes slightly margined; bill straight, much wider than in Tringa minutilla and enlarged at the tip; tail doubly emarginate. *Summer:* Coloration similar to the Least sandpiper in pattern, but the edgings of the upper feathers pale buffy cinnamon. *Winter:* Upper parts plain grayish with dark shaft streaks, breast mostly without streaks. *Young:* Marked with buffy and grayish white and the chest tinged with buffy.

Length 5.5–6.55 inches; extent 11.5–12.75; wing 3.25–3.95; tail 1.5–1.65; tarsus .85–.95; middle toe .55–.65; bill .66–.92.

This little Sandpiper is one of our commonest shore birds and still appears in large numbers during both spring and fall migrations on the beaches and mud flats of our seacoast and inland waters. The spring migrations begin from the 28th of April to the 8th of May and end from the 1st to the 13th of June. The return flight begins from the 4th to the 20th of July and continues until the 20th of September, and occasionally to the middle of October. On the central lakes I have sometimes observed it as late as the last of October and the 5th of November. This species winters from the gulf coast to South America and breeds in arctic America.

The Semipalmated sandpiper often associates with the Stint, or Least sandpiper, and both are known as peeps, or oxeyes, the present species often being called the Sand oxeye, and the former the Meadow oxeye, the names indicating a slight difference in the preferred haunts of the two species. They are as gregarious as dunlins and great clouds of peeps are often seen executing their aerial maneuvers over the shores and marshes. Like the lead-backs also they keep up a continuous peeping chatter of good fellowship as they run nimbly about the beach, searching for the small crustaceans, worms and insects upon which they feed.

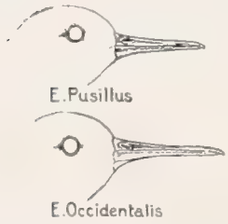
Ereunetes mauri Cabanis

Western Sandpiper

Ereunetes mauri Cabanis. Journal of Orn. 1856. p. 419
Ereunetes occidentalis A. O. U. Check List. Ed. 2. 1895. No. 247

occidentā'lis, Lat., western

Description. *Bill longer* than in E. pusillus. In summer the *upper parts* are *much brighter* rusty or cinnamon and the breast more heavily marked with dusky than in the preceding species. In winter the dimensions must be relied upon.



Bills of Semipalmated and Western sandpipers. ½ nat. size

Wing 3.6–3.9 inches; tarsus .85–.95; middle toe .55–.65; bill .85–1.15. The larger dimensions are of females as in the preceding species. While the length of the bill in females of pusillus equals or exceeds that of the smallest males of mauri, the dimensions of the same sex do not overlap, the bill of pusillus ♂ being .66–.75 and the ♀ .8–.92, while the bill of mauri ♂ .85–.95 and the ♀ 1–1.2.

This species is confined mostly to western North America, breeding on the arctic coast and wintering from the gulf coast to South America. During the migrations it occasionally appears in numbers on our shores, as in 1897, during July and August, when it was abundant on Long Island [Braislin, Auk, 16:191]. In Mr Dutcher's Long Island Notes, we find reference to four specimens taken by Mr Lawrence in Queens county, July 29, 1889, and in Mr Dutcher's Collection is a specimen taken at Point Rockaway, August 29, 1891, and three others taken at Rockaway by Mr Lawrence, July 17, 1893. I have never secured a specimen in western New York, but Mr Savage took it near Buffalo on the Canadian side in September 1897. If a close watch were kept among the Semipalmated sandpipers taken on our inland waters, this species would be detected occasionally.

Calidris leucophaea (Pallas)

(Calidris alba on plate)

Sanderling

Plates 33, 34

Tringa arenaria Linnaeus. Syst. Nat. Ed. 12. 1766. 1: 251
Calidris arenaria DeKay. Zool. N. Y. 1844. pt 2, p. 245, fig. 205
A. O. U. Check List. Ed. 2. 1895. No. 248

cali'dris, Gr. καλίδρις; Lat. *calidris*, a beach bird; *leucophaéa*, Gr. λευκός, light; φαιός, dun, gray

Description. *Hind toe wanting;* front toes free but with narrow, finely scalloped margins; *inner primaries, secondaries* and greater *coverts*, and *tail feathers partly white. Summer:* Head, neck, breast and upper parts varied with rufous and black, tipped or frosted with whitish; belly, flanks and under tail coverts and under wings pure white. *Winter:* Upper parts pale ashy gray varied with blackish along the shaft lines; entire under parts immaculate white.

Length 7–8.75 inches; extent 15–16; wing 4.7–5; tail 2.25; tarsus .9–1.05; middle toe and claw .75; bill .95–1.

The Sanderling is undoubtedly the most widely ranging of our shore birds, breeding in the northernmost portion of the holarctic region and migrating southward in winter, reaching nearly all parts of the world in its wanderings. In this hemisphere it winters from the Middle States to

Patagonia. It is a common migrant, especially in the fall, along the coast of New York and the Great Lakes. On our smaller lakes and rivers it is much less common though by no means one of the rarest shore birds. The spring migrations on Long Island begin from the 15th to the 30th of March and end from the 1st to the 14th of June. By the 4th of July a few are already returning from the north and the migration is well under way by the 1st or 10th of August. They are usually found in numbers through September and October and a few are observed as late as November 20th and December 8th. Stragglers of this species like the Red-backed sandpiper are occasionally taken in midwinter on the coast of Long Island. In western New York the Sanderling is not often observed in spring, but sometimes occurs late in May when the southern birds are hurrying to their breeding grounds.

The Sanderling, or Surf snipe, is the whitest of all our sandpipers and our most characteristic beach bird. Even more than the Sand oxeye they prefer the sandy beaches, bars and flats which are washed by the waves, and are usually seen running in troops along the hard packed sand, advancing as each wave recedes and retreating as the next advances, gleaning the small mollusks, crustaceans and insects which are washed up on the shore. They are quite gregarious and numerous flocks circle up and down the beach at a low elevation, occasionally uttering their "slender and rather plaintive whistle." Late in the fall they become exceedingly fat and are usually regarded as a delicacy.

Limosa fedoa (Linnaeus)

Marbled Godwit

Plate 37

Scolopax fedoa Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 146
Limosa fedoa DeKay. Zool. N. Y. 1844. pt 2, p. 252, fig. 238
A. O. U. Check List. Ed. 2. 1895. No. 249

limō'sa, Lat., muddy; *fed'oa*, of unknown derivation

Description. *Large;* bill and legs long; *bill bent slightly upward* for its whole length; tarsi about twice as long as the middle toe; toes narrowly margined; tail short and even; *general color pale ocherous* or cinnamon or ocherous buff; head and upper parts streaked and barred with dusky

brownish. *Adult:* With dusky bars on the breast, sides and flanks. The young with immaculate under parts; legs dusky; bill dull flesh color, dusky toward the tip.

Length 16–22 inches; extent 30–40; wing 8.5–9; tail 3–4; tarsus 2.75–3; middle toe 1.4; bill 3.5–5.5. Female decidedly the larger.

The Marbled godwit, or Brown marlin, breeds from Nebraska to Saskatchewan, winters in the West Indies and Central America, and was formerly a regular spring and fall migrant on the shores of Long Island, but was not an abundant species even in the days of Giraud and Pike. It is now a rare visitant or straggler. The following are the only records for the past 30 years which have come to my notice:

Syracuse, N. Y. June 1876. (Howlett). Birds Cen. N. Y. 32
Shinnecock bay, L. I. Aug. 12, 1881; Sept. 1–8, 1883, (3); Aug. 25, 1885; Aug. 31, 1885, (3); Sept. 15, 1885. Dutcher, Auk, 3: 437
Atlanticville, L. I. Aug. 23, 1887; Aug. 27, 1887, (pr.); July 28, 1888. (W. M. Lawrence). Dutcher, Long Island Notes
Shinnecock, L. I. Aug. 31, 1887. (Perkins). Dutcher, Long Island Notes
Good Ground, L. I. Aug. 18, 1888. (Hendrickson). Braislin, Birds of Long Island, 1907. p. 61
Orleans co., N. Y. Oct. 1888. (W. F. Palmer). David Bruce, Notes
Albany, N. Y., Aug. 23, 1890. A. F. Parks
Niagara river, N. Y. Oct. 1891. James Savage, Notes

Limosa haemastica (Linnaeus)

Hudsonian Godwit

Plate 37

Scolopax haemastica Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 147
Limosa hudsonica DeKay. Zool. N. Y. 1844. pt 2, p. 253, fig. 230
Limosa haemastica A. O. U. Check List. Ed. 2. 1895. No. 251

hæmas'tica, Gr. αἱμαστικός, bloody-red

Description. Much smaller than the Marbled godwit, but similar in shape. Upper *tail coverts white*, the lateral ones tipped with black; *tail black except the base and narrow tip which are white;* primaries blackish with white shafts and bases; axillars black. *Summer:* Head, neck and upper parts varied with blackish and pale chestnut and buffy; *under parts deep chestnut barred with dusky* and often tipped with whitish. *Winter:* Upper parts plain brownish gray; head, neck, and under parts dingy white or

buffy grayish. Young resemble summer adults above and winter adults below.

Length 14–16.75 inches; extent 25–28; wing 7.5–8.6; tail 3–3.5; tarsus 2.35–2.55; tibia bare 1; middle toe and claw 1.3; bill 2.75–3.5; weight 9–10 ounces. Female somewhat larger than the male.

The Hudsonian godwit, or Ring-tailed marlin, is a nearctic species breeding in arctic America, migrating southward through the Mississippi valley and along the Atlantic coast, and wintering in South America as far as Patagonia. It is more common than the Marbled godwit on the coast of Long Island and still occurs in small numbers during the migrations. In Dutcher's Long Island Notes I find about 25 definite migration dates ranging between August 8th and October 9th, during the years 1881 to 1893, the hight of the migration season seeming to occur between August 23d and September 10th. On August 31st, 1903, a large flight occurred along the Long Island coast and many gunners killed a dozen or more of these birds [*see* Kobbe, Auk, 21: 79]. Dr Braislin also reports it from Quogue, L. I., September 23, 1896, and Rockaway, L. I., August 30, 1903 [Auk, 22: 167]. Our inland records are as follows:

Ithaca, N. Y. Nov. 5, 1878. (R. B. Hough). C. J. Pennock
Green Island, Albany co., N. Y. Oct. 24, 1882. A. F. Parks
Onondaga lake, N. Y. Oct. 13, 1883. A. W. Perrior
Lake Ontario, Orleans co., N. Y. Sept. 1890. David Bruce
Oneida Lake, N. Y. Sept. 7, Oct. 7, 1891. Bagg, Auk, 11: 163

Godwits, like the curlews and larger plovers, formerly migrated along the Atlantic coast in large flocks, but seldom appear in numbers unless driven to land by storms, which force them from their ocean course between Newfoundland and South America. At such times they appear on Cape Cod, Marthas Vineyard and eastern Long Island. Being fat from feeding on the small shellfish, berries, and tender roots which abound on the Labrador coast from which they came, they are highly prized by epicures. They are very shy but respond readily to an imitation of their whistle, or the cries of wounded companions, and when these flights occur they are taken in great numbers, which undoubtedly accounts for the decline of this species, as its nesting grounds are practically beyond the interference of man.

Totanus melanoleucus (Gmelin)

Greater Yellow-legs

Plate 36

Scolopax melanoleuca Gmelin. Syst. Nat. 1788. Ed. 1. 2: 659
Totanus melanoleucus DeKay. Zool. N. Y. 1844. pt 2, p. 250, fig. 221
A. O. U. Check List. Ed. 2. 1895. No. 254

tŏt'anus, Ital. *totano*, a kind of snipe; *melanoleu'cus*, Gr. μέλας, black; λευκός, white

Description. Large; bill longer than head, bent very slightly upward from the middle, the nasal groove extending nearly half way to tip; legs very long; tarsus one and one half times the middle toe; *legs yellow;* bill black; *plumage blackish, white and grayish brown; rump and tail coverts white,* imperfectly barred; tail varying from white to gray, barred with dusky; primaries blackish, shaft of first white; flanks and under tail coverts barred with dusky; head and neck streaked with white and dusky. *Summer:* Upper parts varied with black, gray and white, the former quite prominent; under parts white spotted and barred with blackish, except on the belly. *Winter:* Upper parts brownish gray spotted with white and dusky on the edges of the feathers; under parts white, lightly streaked with grayish on the jugulum and breast.

Length 12.15–15 inches; extent 23–26; wing 7.5–7.85; tarsus 2.5–2.75; middle toe and claw 1.7; length from tip of bill to end of outstretched toes 16–18 inches; bill 2.2–2.3; weight 6–10 ounces.

Range and migration. This species breeds from Minnesota and the Gulf of St Lawrence through boreal America, and migrates southward both on the seacoast and through the interior, wintering from the gulf coast to Patagonia. With us it is a common migrant. The spring migrations begin from the 9th to the last of March or the 5th of April on the coast, and end from the 1st to the 5th of June, stragglers sometimes appearing as late as the 22d of June. The return movement begins from the 10th to the 25th of July, continues through August and September, and ends from the 20th of October to the 15th of November. Through the interior of the State this species rarely appears before the 12th of April, is most often seen during the latter part of April, but is occasionally observed throughout the month of May. Along the lakes the fall migration commonly begins about the middle of August and continues till late in

October. This species is well represented during the spring migration, but like most of our shore birds is more common in the autumn, and as it comes and stays later than the Lesser yellow-legs is often called the Winter yellow-legs.

The Greater yellow-legs, or Varied tattler, frequents both the sandy beach, the muddy banks of pools and streams, and the flooded marshes. It walks with easy carriage along the strand, or wades far out in the shallows, feeding on the small crustaceans and aquatic insects which lurk in the mud or among the aquatic plants, also on small fishes which I have sometimes taken in considerable numbers from its gullet and stomach. It is wilder and more suspicious than many of our shore birds, and, when approached, usually takes flight when well out of range, giving voice to its loud penetrating whistle which resembles the syllables *wheu-wheu-wheu, wheu-wheu.* These alarm notes are frequently repeated and immediately give notice to all the flats and marshes that the sportsman is abroad. This habit has given it the name of Telltale tattler in many localities. Its call note is often heard at night when the birds are migrating, and during the day I have listened to its notes coming from such an elevation that the birds themselves could not be distinguished as they passed over me on their southward journey. It is a common experience also when gunning on the marshes to hear the call of these birds from high in the air long before they appear, as they stoop from their lofty course to rest and feed for a time.

Yellow-legs sometimes gather in large flocks, but usually travel in small companies of six or seven birds, and do not bunch so closely as some shore birds when alighting among decoys, a fortunate circumstance, which, combined with its suspicious nature, is likely to prove the salvation of the species. In the fall they become very fat, and are esteemed by some as game, but to my palate its flesh is too strong in flavor, but this, as in other species, probably depends upon the food of the birds for some time previous to their capture.

Totanus flavipes (Gmelin)

Lesser Yellow-legs

Plate 36

Scolopax flavipes Gmelin. Syst. Nat. 1788. Ed. 1. 2: 659
Totanus flavipes DeKay. Zool. N. Y. 1844. pt 2, p. 248, fig. 212
A. O. U. Check List. Ed. 2. 1895. No. 255

fla'vipes, Lat., yellow foot

Description. Essentially like the Greater yellow-legs in shape and color, but decidedly *smaller*, the tarsus proportionately longer, and the upper mandible grooved for more than half its length rather than less as in melanoleucus.

Length 9.5–11.5 inches; extent 19–21.5; wing 6.1–6.7; tarsus 2–2.15; middle toe and claw 1.25; tibia bare 1.25; bill 1.3–1.55; weight 3.5–5 ounces.

Distribution and migration. This nearctic species breeds from Minnesota to the arctic regions, and migrates southward, mostly in eastern America, to the gulf coast and Patagonia. DeKay, 1844, states that many remain to breed in New York, but this was probably a mistake which arose from the fact that the Yellow-legs is a late migrant in spring and begins to return from its breeding grounds early in July. I have seen only one record of its nesting in New York State which seems authentic, and this, of course, may be a case of wing tipped birds, as spring shooting was practised at that time. This was in 1891 when a pair reared their young near Phelps, N. Y. [*see* Bowdish, Auk, 8: 394].

The Yellow-legs is much less common in the spring than in the fall migrations. The few Long Island records range between May 6th and 26th. My only records for western New York lie between April 20th and May 30th. During the fall it is one of our commonest shore birds, appearing on Long Island from the 7th to the 23d of July, and departing for the south from September 13th to October 5th. Western New York dates range between July 12th and October 12th. It is usually commonest during August and early September.

Haunts and habits. The Yellow shanks, or Lesser yellow-legs, frequents the bars, mud flats and marshes which are exposed by the ebbing tide,

or left bare by the lowering waters of our lakes and rivers. Its habits are similar to those of the Greater yellow-legs, but in general it is less suspicious, travels in larger flocks and bunches more closely when coming to decoys. Giraud mentions an instance of 106 being killed by discharging both barrels into a flock which were sitting along the beach, and Audubon was present when 127 were killed by the discharge of three barrels. Is it any wonder that shore birds have diminished in numbers? During the summer of 1907 the water was unusually low in the Montezuma marshes and many mud flats and bars were exposed. Consequently shore birds were exceptionally numerous and flocks of two or three hundred yellow-legs were not uncommon and 20 or 30 were occasionally killed by a single shot.

The notes of this species resemble closely those of the Greater yellow-legs, but it is slightly more vociferous, uttering more notes in succession, commonly following the formula, *wheu, wheu-wheu-wheu-wheu, wheu-wheu, wheu.* The fat with which the body of the Yellow-legs is incased is strongly flavored and its flesh does not compare favorably with that of the Snipe and larger sandpipers, but it is eagerly sought after, like its larger representative, and is commonly served in city restaurants under the name of Snipe or Plover.

Helodromas solitarius (Wilson)

Solitary Sandpiper

Plate 36

Tringa solitarius Wilson. Am. Orn. 1813. 7: 53, pl. 58, fig. 3
Totanus chloropygius DeKay. Zool. N. Y. 1844. pt 2, p. 249, fig. 210
Helodromas solitarius A. O. U. Check List. Ed. 2. 1895. No. 256

helŏ'dromas, Gr. ἕλος, marsh, δρομάς, running; *solitā'rius*, Lat., solitary

Description. Bill slender, about straight; upper mandible grooved for over half its length; tarsus about equal to middle toe and claw; outer tail coverts and *outer tail feathers white barred with dusky;* central coverts and central pair of tail feathers dusky, spotted on the edges with white; upper parts in general *dusky brownish,* somewhat glossed with dark greenish, streaked on the head and neck, and *spotted with whitish* on the back, scapulars and longer wing coverts; *wings dusky, contrasted abruptly with the white belly;* under parts white, the jugulum and upper breast and sides under the wings marked with dusky; axillars and under wing coverts white, barred

with dusky; legs dull greenish; bill blackish, lighter at the base. *Winter:* Similar but grayer above and less distinctly streaked with dusky on the foreneck. *Young:* Similar but with thicker speckles of dull buff above and the head more uniform grayish.

Length 7.5–9 inches; extent 15.5–17; wing 4.75–5.4; tail 2.25; tarsus 1.2–1.3; middle toe and claw 1.12–1.22; bill 1.12–1.25.

Range and migration. The Solitary sandpiper is a nearctic species representing the Green sandpiper (Helodromas ochropus) of the palearctic region. It breeds from the northern United States well into or through boreal America, and winters on the gulf coast and in tropical America. It is a fairly common migrant in all parts of New York State, being more generally distributed than any species of this order, with the exception of the Spotted sandpiper and Woodcock. On Long Island it appears between the 5th and 15th of May and passes northward from the 15th to the 28th of that month, returns from the 7th to the 20th of July and departs for the south from the 25th of September to the 14th of October. In western New York it arrives from April 25th to May 8th, passes northward from the 18th to the 30th of May, returns from the 12th to the 30th of July, and departs for the south from September 20th to October 12th. In northern New York this Sandpiper is supposed to be a summer resident and I have no doubt its nest will be found eventually in the Adirondack country. As yet, however, it is entered as a summer resident for northern New York on rather slender evidence. In Dr Merriam's Adirondack Notes, I have found no record of this species between May 30th and August 10th. Mr Pennock who has made several trips to the Adirondacks has no record between May 25th and August 6th. My own party, which spent the early summer of 1905 in the higher Adirondacks, failed to establish its presence beyond a doubt, although Mr Achilles was confident that he saw one specimen near Clear Pond on July 6th. No member of this order is more mysterious in its breeding habits, and many doubt all the records which have been accredited to the northern United States.

Haunts and habits. The Solitary sandpiper is even less gregarious than the Spotted sandpiper although five or six individuals are sometimes seen scattered about a swampy pool, or springy bog in the woods. Many a

time I have made my way cautiously to the margin of some old mill pond, or secluded lakelet in the forest, expecting to see Wood duck, Hooded mergansers, or herons, but found only a scattered troup of Solitary sandpipers probing in the "spring moss" (Chara foetida), or wading quietly in the shallow water, or standing on water-soaked logs which projected above the surface of the pool. Some of them always seemed to be aware of my approach and silently nodded in their characteristic mechanical manner. They are silent birds and quite unsuspicious, rarely taking wing unless very closely approached. Sometimes when one member of the party is shot the others will not take wing, or, if so, will fly only a short distance, uttering a mellow whistle which suggests the bird's alliance with Yellow-legs, but is far more subdued and melodious. When alighting they have the habit, even more than other members of this family, of holding their long wings stretched upward almost vertically, displaying the striking pattern of the wing-markings and slowly folding them as their poise is gained and the search for food resumed.

Catoptrophorus semipalmatus (Gmelin)

Willet

Plate 38

Scolopax semipalmata Gmelin. Syst. Nat. 1788. Ed. 1. 2: 659
Totanus semipalmatus DeKay. Zool. N. Y. 1844. pt 2, p. 251, fig. 219
Symphemia semipalmata A. O. U. Check List. Ed. 2. 1895. No. 258

catoptrŏ'phorus, Gr. κατοπτρον, mirror, and φέρω, φορ, to carry, referring to the mirrorlike wing patch; *semipalmā'tus*, Lat., half webbed

Description. Front toes webbed at the base; tarsus 1½ times the middle toe; bill thick, slightly recurved, longer than head, the upper mandible grooved for about ½ its length; end portion of wing feathers black, bases of the primaries and greater portion of secondaries white; axillars and longer under coverts black; lesser under coverts of the humerus and of the radius and ulna white; the *wings* thus *showing striking black and white pattern* when extended; *tail grayish white; upper tail coverts mostly white*, barred at the base with dusky. *Summer:* Upper parts varied with blackish and ashy; head and foreneck streaked, breast and sides barred with dusky; belly white. *Winter:* Upper parts plain ashy, or brownish gray; under parts white shaded with gray on the foreneck, breast and sides. *Young:*

Similar but tinged with buffy on the back and sides; legs bluish; bill blackish, rather bluish at the base.

Length 15–17 inches; extent 28; wing 7.5–8.25; tail 3; tarsus 1.95–2.6; middle toe and claw 1.65–1.7; bill 2–2.5.

The Willet inhabits the Atlantic States from Florida to southern New Jersey, and rarely to the coast of Maine. Its winter home is from the Southern States to Brazil. Formerly it may have bred on Long Island, but Giraud knew of no nest having been found, nor have any since been recorded. It hardly seems probable that all the willets which appear on Long Island during July, August and September are migrants from more northern breeding grounds, and the species undoubtedly journeys up the coast in search of fresh feeding grounds after the breeding season is over. These flights of willets, however, are comparatively rare in recent years. In Mr Dutcher's Long Island Notes, I find records of numerous flocks observed during the first two weeks in August 1884, 1885, 1886 and 1888. A few are sometimes observed as early as July 4th or 11th, but the flight rarely begins before July 25th; the last birds are usually seen from the 17th to the 25th of August, but sometimes as late as September 16th. There are few spring records in recent years, May 11, 1886; May 6, 1887; and April 29, 1890, being all that I find in Mr Dutcher's Notes. In the interior of New York this species was formerly a more or less regular visitant [*see* Birds Cen. N. Y. p. 33]. The following are the only records which I have since 1880:

Canandaigua, N. Y. Aug. 31, 1882. Dr M. S. Gooding
Lake Ontario, N. Y. Sept. 12, 1885. David Bruce
Chautauqua lake, N. Y. May 10, 1897. A. E. Kibbie
Erie, Pa. Apr. 24, 1902. (2). Todd, Birds of Erie, p. 542

The Willet, or Semipalmated tattler, can scarcely be mistaken for any of our other shore birds, its remarkable wing pattern and its loud whistle of *pilly-will-willet* establishing its identity beyond question at a great distance. It was formerly much sought by Long Island gunners, but Giraud remarked that its flesh though palatable was not considered so great a delicacy as its eggs.

Catoptrophorus semipalmatus inornatus Brewster

Western Willet

Description. This western representative of the Willet is larger than the Atlantic coast bird, with a longer and more slender bill, and less heavily marked on the under parts in summer plumage. In winter plumage the dimensions are the only means of distinction. Wing 8–9 inches; tarsus 2.6–2.85; bill 2.25–2.75.

The Western willet has never been definitely recorded for New York, but may occur here, especially in the Great Lakes region.

Pavoncella pugnax (Linnaeus)

Ruff

Tringa pugnax Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 145
Pavoncella pugnax A. O. U. Check List. Ed. 2. 1895. No. (260)

pavoncĕl'la, Lat. diminutive of *pavo*, peacock; *pug'nax*, Lat., pugnacious

Description. Bill nearly straight, grooved nearly to tip, rather broad; legs slender; tarsus 1¼ times middle toe; basal web between outer and middle toes, inner toe free; tail rather long, distinctly barred. *Male in breeding plumage:* Face without feathers, papillate; a long tuft of feathers extending backward on each side of head, foreneck also furnished with a broad ruff, the tufts and ruff being differently colored in nearly every specimen; general plumage varied with ash brown, black, ocherous and white. *Winter plumage:* Face feathered, tufts and ruff wanting; under parts pale buff; upper parts grayish brown with light markings. *Female:* Without ruff; upper parts grayish brown and dusky, pale buff below, much smaller than male.

Length 12–12.5 inches; wing 7–7.5; tail 2.6–3; tarsus 1.75–2; middle toe and claw 1.4; bill 1.5. ♀ length 10 inches; wing 6; tarsus 1.4; bill 1.15.

This palearctic species is accidental in eastern America, there being 24 or more records [*see* Dean, Auk, 22: 410; Palmer, Auk, 23: 98; Hardy, Auk, 25: 82]. Two specimens from Long Island are in the G. N. Lawrence Collection, American Museum of Natural History, a male taken in October 1851 [Lawrence, Lyc. Nat. Hist. N. Y. Ann. 5: 220] and a female taken May 15, 1868 [Chapman, Birds of Vicinity of N. Y. Ed. 2. p. 35]. Baird's statement that the Ruff has been "so frequently killed on Long Island," evidently refers to Lawrence's specimen, as I can find no evidence of any other records for New York.

Bartramia longicauda (Bechstein)

Bartramian Sandpiper

Plate 38

Tringa longicauda Bechstein. Uebers. Lath. Ind. Orn. 1812. 2: 453
Totanus bartramius DeKay. Zool. N. Y. 1844. pt 2, p. 247, fig. 209
Bartramia longicauda A. O. U. Check List. Ed. 2. 1895. No. 261

bartra'mia, in honor of John Bartram; *longicau'da*, Lat. *longus*, long; *cauda*, tail

Description. Bill rather shorter than head, much shorter than tarsus, equal to middle toe, upper mandible grooved for more than ¾ its length and slightly concave; gape wide, reaching below the eyes; tail long, graduated; tarsi much longer than middle toe and claw; outer and middle toes webbed at the base; inner toe free; neck and legs long; head small, pigeon- or plover-shaped; no decided sexual or seasonal changes in coloration. Above varied with blackish, ocherous buff and gray; primaries blackish, the outer one barred with white; tail feathers varying from grayish brown to buff and white at the base of the outer ones, all more or less barred with blackish; under parts white, varied on the foreneck, breast, and sides with blackish, and tinged with buff; legs light yellowish; bill yellowish at base and below, dusky toward the tip.

Field marks. The amateur may recognize this species by its general buffy brown color, as seen at a distance, its mellow bubbling flight whistle, and its preference for dry uplands, rather than the marshy shores.

Distribution and migration. The Bartramian sandpiper, or Upland plover as the sportsmen call it, is a summer resident of eastern Long Island and the plains of inland New York, especially in the counties of Erie, Niagara, Orleans, Monroe, Ontario, Oswego, Madison, Oneida, Lewis, Jefferson, St Lawrence, Clinton, and Rensselaer [*see also*, Distribution map, p. 20]. Although the species has been diminishing on Long Island, it is holding its own in northern and western New York, and certainly has increased on the plains of northern Erie county and western Monroe county during the last ten years. The spring migration begins from the 13th to the 20th of April and the breeding season is in late May, or early June. About the 20th of July, or even earlier, sometimes as early as the 4th, they gather in small flocks, which are probably augmented by migrants from farther north which continue to arrive until about the 10th of August. In western New York the last birds are usually seen about the 25th of August, a few some-

times remaining till the 10th of September, which are also the dates of its departure from Long Island. It is a nearctic species, breeding from Virginia and Kansas, to Nova Scotia and Alaska, and wintering in South America.

Haunts and habits. More than any other shore bird, this species, as its name of Upland plover signifies, is a bird of the dry fields and pastures, rarely visiting the shores or marshy lowlands. It seems to prefer dry rolling plains in western New York, especially waste fields, wide pastures, and even cultivated fields. On Long Island and the New England coast it occurs on the grassy sand plains, as well as the barren hilltops of New England. Mr H. L. Bowers writes, 1900, "they are very plentiful in the dry swamps west of Rome, during the summer. They nest in the timothy fields near by, but the old birds are never seen near the nest and will not leave their eggs till nearly stepped on. They arrive April 14th and nest in May." Mr George F. Guelf of Brockport writes, "they are common on the level fields which extend from 4 miles east of Clarkson, Monroe county, about 9 miles to the west, and lying about 1 mile north of the Ridge road." Mr E. H. Short of Chili says they are becoming commoner and extending their range, often nesting in cornfields, potato patches, and fallows. James Savage and Hermann Grieb state that it has grown commoner within the last 15 or 20 years in the vicinity of Buffalo and is rarely killed by the sportsmen, as it is practically impossible to get within shooting distance of the birds. The common experience of observers throughout the interior of New York is that very few Upland plovers are shot, the nature of the country making it practically impossible to hunt it on horseback or from wagons, as is often done on the western prairies. The chief enemies of the bird in western New York are certainly not the gunners, but wandering cats and other predacious animals, sheep and cattle which destroy its eggs, late plowing and the cultivating of fields.

This beautiful bird like most members of the Snipe family executes a peculiar performance in the mating season. The bird mounts high in air, or alights on a knoll, "a fence, or even a tree, and utters a prolonged mournful mellow whistle, more like the wind than like a bird's voice, which may be heard even in the night, and is one of the most weird and never to be

forgotten sounds in nature." [Langille] The same writer gives its alarm note as a rapid *quip-ip-ip-ip, quip-ip-ip-ip,* and the song as *chr-r-r-r-r-ee-e-e-e-e-e-oo-o-o-o-o-oo.* Will Richard, in describing a pair near Rouse Point, N. Y., states that they are called "Wet-weather" birds by the people of that locality from one of the calls which the bird utters, and writes the song as follows: *wh-o-e-e-et-et-e-e-e-e-e-e-o-o-o-ooo.* This is a good rendition of the weird whistle described by Langille, as I have heard it in western New York, the notes rapidly rising and swelling, then slowly falling and dying away into a hollow windlike whistle, very much like the literation of Mr Richard's description. This love song of the Upland plover, and the winnowing of the Snipe, and the flight song of the Woodcock are three of the most interesting sounds of our bird life, and belong to the three most highly prized game birds of the order Limicolae, all three of which fortunately breed within our limits, and should be protected in every possible manner from the extermination which has overtaken our Wild turkey, Heath hen, and Wild pigeon.

The food of the Bartramian sandpiper consists largely of grasshoppers, crickets, beetles and other insects, occasionally varied with seeds or small fruits. The young follow their parents as soon as hatched, and the old birds evince considerable distress when the young are molested, often fluttering along the ground, feigning lameness, or a broken wing, after the manner of a Killdeer, to draw the intruder away from the site. Their carriage is light and graceful, they run with great swiftness through the rows of stubble to escape from intrusion, or crouch motionless in the grass until the enemy is dangerously near, when they spring into the air and fly swiftly away, often passing entirely out of sight before alighting, but uttering a mellow whistle as they go, evidently to inform the members of their clan that the enemy is near.

The Bartramian sandpiper conceals its nest in the thick grass of the meadow, or under a tussock in the pasture or a waste field, and is rarely or never seen in its vicinity, and will not leave it until she is almost trod upon. Mr Short told me of finding a nest while plowing a field, which the

old bird refused to leave until his horses were standing over her and the plowshare was at the very point of burying her and her treasures in the earth. The nest is a mere depression lined with grasses and small stalks. The eggs are four in number, large and pyriform in shape, buffy white in color spotted with chocolate and reddish brown, more thickly about the larger end, the average dimensions being 1.75 x 1.3 inches. The downy young are buffy white tinged with rusty above and mottled with blackish; blackish spots below the eye, a small one on the lores and a large one behind the ear.

Tryngites subruficollis (Vieillot)

Buff-breasted Sandpiper

Plate 38

Tringa subruficollis Vieillot. Nouv. Dict. d'Hist. Nat. 1819. 34: 465
Tringa rufescens DeKay. Zool. N. Y. 1844. pt 2, p. 238, fig. 197
Tringites subruficollis A. O. U. Check List. Ed. 2. 1895. No. 262

tringī'tes, Gr. τρυγγύτης, a sandpiper; *subruficŏl'lis*, Lat. *sub*, below, *rufus*, reddish, and *collum*, neck

Description. Bill shorter than head, slender, grooved nearly the whole length, hard at tip; gape extensive; tail rounded, the central feathers projecting; tarsus longer than middle toe and claw; toes cleft. *Primaries* grayish brown, darker toward the tips, their inner webs and the secondaries peculiarly *marbled with white;* central tail feathers greenish brown, darker toward the end, the others grayish or rufescent with subterminal black bar and buffy white tips; upper parts in general olive-brown broadly margined with yellowish brown, or ocherous, giving a prevailing tawny color; *under parts pale buff* slightly streaked or spotted on the sides of the breast; bill brownish black; legs yellowish. *Winter and immature:* Very similar but paler below.

Length 7–8.9 inches, average 8.5; extent 16–17; wing 5–5.5; tail 2.5; tarsus 1.15–1.3; middle toe and claw 1; bill .7–.8.

The Buff-breasted sandpiper is a nearctic species breeding in high latitudes, and wintering in South America. It is rather uncommon even in the Mississippi valley and is one of the rarer sandpipers on our Atlantic coast. Like the preceding species, it inhabits the dry prairies and sandy fields during migration and is rarely taken along the beach. The following

are the only records for New York during the last 50 years that have come to our notice:

West Troy, N. Y. Aug. 27, 1861. (2). Thomas Heimstreet
Penn Yan, N. Y. Oct. 15, 1874. James Flahive
Montauk Point, L. I. Aug. 26, 1880. Berier, N. O. C. Bul. 6: 126
Blissville, L. I. Sept. 16, 1881. (Hendrickson). Dutcher
Kendall, N. Y. Apr. 20, 1884–85. Posson, Auk, 16: 194. David Bruce
Lockport, N. Y. Aug. 31, 1886. Davison List
Brockport, N. Y. Sept. 1886. David Bruce
West Seneca, Erie co., N. Y. Aug. 1888. James H. Savage
Mastic, Suffolk co., L. I. Aug. 28, 1888. Dutcher, Auk, 6: 136
Long Island City, L. I. Sept. 17, 1889. W. F. Hendrickson
Gaines, N. Y. Fall 1897. Posson, Auk, 16: 194
Shinnecock bay, L. I. About 1870. (Nichols). Dutcher
Rockaway, L. I. Aug. 25, 1873; Aug. 1874; Sept. 13, 1875; Sept. 1879; Lawrence, Forest and Stream, 10: 235
Rockaway, L. I. Aug. 1888. (3). (Lawrence). Dutcher
Queens co., L. I. Aug. 31, 1894. Howell. (Johnson). Braislin, Birds of Long Island, p. 63
Rockaway Beach, L. I. Sept. 11, 1904. (Peavey). Braislin, Auk, 22: 169
" Sept. 4, 1906. (Peavey). Braislin, Birds of Long Island, p. 63
Cleveland, Ohio. Wheaton, Birds of Ohio, p. 491
Ontario, near Lake Erie. Breeds. McIlwraith, Birds of Ontario. 1894. p. 156–57

Actitis macularia (Linnaeus)

Spotted Sandpiper

Plate 36

Tringa macularia Linnaeus. Syst. Nat. Ed. 12. 1766. 1: 249
Totanus macularia DeKay. Zool. N. Y. 1844. pt 2, p. 246, fig. 206
Actitis macularia A. O. U. Check List. Ed. 2. 1895. No. 263

actī'tis, Gr. ἀκτίτης, dweller by the shore, or worker by the shore; *maculā'ria*, Lat., spotted

Description. Bill straight, as long as head or tarsus or middle toe and claw; tibia bare for half the length of tarsus; outer and middle toes webbed to their first joint, inner toe free; tail rounded, half as long as wing; *upper parts grayish olive* with brassy luster, *spotted with dusky*—in streaks on the head and neck, in broken bars on the back; inner tail feathers like the back, outer ones whitish barred with dusky; a line over the eye white; *under parts white, profusely spotted with black*, the spots roundish, and heavier in the female than in the male; wing feathers dark brownish

with white bases, forming a lengthwise wing stripe which shows in flight; legs and base of bill flesh color, the latter blackish toward the tip. *Young:* Similar, but without spots, feathers above edged with buffy white.

Length 7–8 inches; extent 13–14; wing 3.8–4.5; tarsus .9–1.05; middle toe and claw .9–1.05; bill .9–1.05; weight 2 ounces. The female is larger than the male.

Distribution and migration. This is the nearctic representative of the palearctic species hypoleucos. It is found from Hudson bay and Alaska to South America, wintering from South Carolina to Brazil. In New York it is the most universally distributed member of the family, being common in every county in the State, from the 18th or the 30th of April to the 1st or 10th of September, rarely lingering in the southern portions till the middle of October. The birds of the interior of the State evidently come by way of the Mississippi valley, as they arrive from 7 to 10 days earlier in western New York than along the coast. They nest commonly along every stream, pond and lake in the State, except those lakes which are entirely wooded to the water's edge. Our party in 1905 found them breeding on Elk lake, Boreas pond and the Flowed Land near Mt Marcy in the Adirondacks; and every country boy is familiar with the tip-ups which nest near the creek in his pasture, or in the edge of the meadow. The eggs are laid from the 15th of May to the 20th of June.

Haunts and habits. During the nesting season the little Spotted sandpiper, Tip-up, or Teeter-tail, is found in the pastures, cultivated fields and meadows, sometimes at considerable distance from the water, as well as along the brooks and lake shores. During the mating season, the males strut about before the female swelling up the breast, in a manner somewhat suggestive of the Pectoral sandpiper, until they finally burst forth into the shrill pipe which is the more familiar accompaniment of their larklike flights, when they rise several feet in the air and at the close of the song drop into the meadow again. It is impossible for the Tip-up to stand or walk quietly, it keeps teetering or tilting its tail continually as it walks nimbly along the beach or stands on some stone, log, or fence post. When driven from one spot along the lake shore, or river bank, it flies out several rods over the water quite close to the surface, then turns up or down the stream and proceeds some distance before alighting. If disturbed again, the same operation is repeated

until it has been driven some distance from home, when it flies out farther and higher over the water and returns directly to the original spot from which it was startled. The flight of this Sandpiper is quite unlike that of the other members of the family, being performed by well measured wing beats, with the wings drooping below a horizontal line and both wings stroking in unison like the oars of a boat. Its call of *peet, weet*, which it commonly utters when startled, is similar in quality to the love song, but the latter

Photo by Clarence F. Stone

Spotted sandpiper's nest and eggs

is prolonged into a shrill, piping crescendo, uttered as before stated, both when the bird is puffing and strutting on the ground, or rising with upstretched neck and rigidly stroking wings over the nesting site. Its diet is almost wholly insectivorous and its interesting habits and confiding manner should commend it to the protection of man rather than relegate it to the list of game birds.

Nest and eggs. Its nest is usually concealed among the weeds or grass, two or three rods from the brook or lake shore, or under a tussock at the edge of the swamp or cornfield. As usual in this family there are only a

few dry grasses, leaves or weed stalks which form a lining in the slight hollow which contains the eggs. These are four in number, of a creamy buff color, spotted and blotched with chocolate and obscure shell markings, most thickly at the larger end. Average dimensions are 1.3 x 1 inches, or slightly less. The downy young are grayish above with a narrow black stripe from the bill down the neck and back, and a narrow black line on each side of the head through the eye; under parts whitish. They leave the nest soon after hatching and from the first teeter like their parents.

Numenius americanus Bechstein

(Numenius longirostris on plate)

Long-billed Curlew

Plate 37

Numenius americanus Bechstein, in Latham Allg. Ueb. Vögel. 1812. 4, 2, 432

Numenius longirostris DeKay. Zool. N. Y. 1844. pt 2, p. 232, fig. 216
A. O. U. Check List. Ed. 2. 1895. No. 264

numē'nius, Gr. νουμήνιος, a kind of curlew, from νουμηνία, the new moon, alluding to the crescent or sickle-shaped bill; *americanus*, Lat., American

Description. *Large; bill very long and curved*, upper mandible longer and slightly knobbed at the tip; toes webbed at the base; upper parts varied buffy or rufous and blackish, chiefly in streaks on head and neck, and broken bars on the back and wings; outer webs of the primaries blackish; under parts pale ocherous buff; legs dull bluish gray; bill yellowish flesh color at the base and below, blackish toward the tip.

Length 20–26 inches; extent 36–39; wing 10–12; tail 4; tarsus 2.75–3.5; bill 4–8.5 (young of the year only 2.3–3.5).

The Long-billed curlew, Big curlew, or Sickle-bill, breeds in the interior of America as far north as Manitoba and Saskatchewan and winters on the gulf coast and the West Indies. Sixty years ago it was plentiful on Long Island, according to Colonel Pike [Dutcher, Auk, 10:272], but is now only a rare or accidental visitor in New York. The following are our records for the last 35 years:

Far Rockaway, L. I. ♀. Aug. 20, 1873. N. T. Lawrence, Auk, 2: 273
Oneida Lake. Oct. 5, 1880. Ralph & Bagg List, 115
Far Rockaway, L. I. Aug. 26, 1885. N. T. Lawrence, Auk, 2: 273
Canandaigua, N. Y. Sept. 1885 or 1886. A. P. Wilbur

Shinnecock bay, L. I.	About Aug. 15, 1882.	Dutcher, L. I.	Notes
"	1883. (1). (Lane).	"	"
"	Aug. 1884.	"	"
Rockaway, L. I.	July 21, 1884.	"	"
Atlanticville, L. I.	Aug. 14, 1885.	"	"
Good Ground, L. I.	Aug. 5, 1887.	"	"
Atlanticville, L. I.	Aug. 23, 1887.	"	"
Rockaway, L. I.	July 29, 1889. (Several, Lawrence).	"	"
Montauk, L. I.	Sept. 9, 1889.	"	"

Numenius hudsonicus Latham

Hudsonian Curlew

Plate 37

Numenius hudsonicus Latham. Index Ornithologicus. 1790. 2:712
DeKay. Zool. N. Y. 1844. pt 2, p. 233, fig. 215
A. O. U. Check List. Ed. 2. 1895. No. 265

hudson'icus, of Hudson bay

Description. Smaller than the Sickle-bill; bill about twice the length of the head; *top of head brownish black with a sharply defined median streak* of whitish; stripe on side of head from base of bill through the eye brownish black; upper parts varied with blackish and grayish white, or ocherous, the general tone being more grayish and less rufous than that of the Sickle-bill; *primaries* brownish black, *barred on the inner webs with buffy* or pale rufous; under parts grayish or buffy whitish; foreneck and breast streaked, and sides barred with dusky; legs and bill similar to the Sickle-bill's in color.

Length 16–18 inches; extent 31–33; wing 9–10; tail 3.5; tarsus 2.25–2.5; middle toe 1.4; bill 3–4.

The Hudsonian curlew, Jack curlew, or American whimbrel, is the nearctic representative of the palearctic species phaeopus. It breeds in the arctic region, and winters from the gulf coast of the United States to Patagonia, belonging to the troop of shore bird migrants, like the Golden plover and Hudsonian godwit, which perform the autumn migration along the Atlantic coast, often making the flight directly from Nova Scotia or Newfoundland to the coast of South America. When storms are encountered they often appear in numbers on Cape Cod, Nantucket, and Long Island, but some years are scarcely noticed along our coast. The fall migrations

on Long Island begin sometimes as early as the 2d of July, but usually from the 18th to the 25th, and the last birds are seen from the 16th to the 30th of September, the largest flights usually occurring between August 1st and September 10th. In the spring this species is rarely seen, but Mr Dutcher's Notes show that the migration occurs between the 6th and the 30th of May. In the interior of New York, the Jack curlew is less common than along the coast, the following being the definite records:

Brockport, N. Y. Oct. 10, 1880. (3). David Bruce
Union Springs, N. Y. 1882. R. B. Hough
Yates co., N. Y. May 1884. (13). Verdi Burtch
West Seneca, Erie co., N. Y. Aug. 24, 1889. James Savage
Lake Ontario, N. Y. Sept. 10, 1889, David Bruce
Branchport, N. Y. May 29–June 2, 1895. (5). C. F. Stone
Canandaigua, N. Y. May 30, 1897. (Several). Hallenbeck and Newman
Orleans co., N. Y. Sept. 1897. Posson, Auk, 16:195
Oneida Lake, N. Y. Sept. 5, 1899. Bagg, Auk, 17:177

In Giraud's day this species was less abundant than the Long-billed curlew on Long Island, but the reverse is now the case. In fact it is the only curlew that we have at the present day. It is easy to see why the Long-billed curlew diminished in numbers as its nesting grounds have been largely destroyed by the settlement of the west and northwest, but the present species, breeding practically beyond the disturbing influence of mankind, is likely to be preserved for many years to come.

The Jack, or Short-billed curlew, as the gunners call this bird, has an easy, steady flight, rarely soaring except when about to alight, or suddenly arrested by an imitation of its whistle. Like the Long-billed curlew, it exhibits much sympathy for wounded companions, often sacrificing its life by returning in answer to their cries. Its flesh is much inferior to that of the Eskimo curlew, being quite unpalatable, except in the fall when it has fed for some time on berries and grasshoppers.

When the amateur bird student first meets with this species, he is apt to believe he has seen a Long-billed curlew, its size and long bill, though much inferior to that species, being quite impressive when compared with our commoner shore birds.

Numenius borealis (Forster)

Eskimo Curlew

Plate 37

Scolopax borealis Forster. Phil. Trans. 1772. 62: 411, 431
Numenius borealis DeKay. Zool. N. Y. 1844. pt 2, p. 234, fig. 214
A. O. U. Check List. Ed. 2. 1895. No. 266

boreā'lis, Lat., northern

Description. Much smaller than the other curlews; bill slender, slightly curved. Similar to the Hudsonian curlew in color, but with *no sharp central line on the crown* which is mottled with buffy; the *primaries without bars; breast markings V-shaped.*

Length 12–15 inches; extent 28; wing 8–8.75; tail 3; tarsus 1.7–1.85; middle toe 1; bill 2–2.5.

The Eskimo curlew, Dough-bird, or Fute, was formerly a regular fall migrant on Long Island and perhaps in western New York, nesting in the arctic regions, and wintering in South America as far as Patagonia. It was formerly abundant on the Labrador coast in autumn, and frequently made the journey to South America directly over the Atlantic, unless driven to land by storms. The spring migration was through the Mississippi valley where it abounded during the month of May. Many like Professor Cooke believe that this species is now practically extinct. If so it seems that this unfortunate fate has overtaken it because of its habit of bunching so closely during its migrations, that gunners, as well as unfavorable weather conditions, had exceptional opportunities to effect its destruction. It is more often found on the dry upland fields than the other curlews, and associates with the Golden plover and Upland plover, feeding on grasshoppers and other insects. In the fall it is extremely fond of the crowberry which grows in abundance in Labrador, and becomes fat and well-flavored. Dr T. B. Heimstreet of Troy, N. Y., writes that a few of this species associate with the Golden plover during the last week of August and the first two weeks of September, on the fields along the south bank of the St Lawrence river, not far from New York State, and are eagerly

pursued by sportsmen. All the New York records which I can find for the last 35 years are as follows:

Otisco, N. Y. 1873. (2). Barnum, Birds of Onondaga Co. p. 26
Far Rockaway, L. I. Sept. 12, 1875; Sept. 10, 1876; Sept. 26, 1884. N. T. Lawrence. Auk, 2: 273
Good Ground, L. I. Sept. 7, 11, 1885. (Perkins). Dutcher, L. I. Notes
Long Island. Sept. 7, 1885. (Howell). Dutcher "
Montauk Point, L. I. Sept. 11, 1886. (Scott). Dutcher "
Queens co., L. I. Sept. 30, 1887. (Hendrickson). " "
Good Ground, L. I. Sept. 13, 1889. (Perkins). " "
Queens co., L. I. Sept. 11, 1889. " "
" Sept. 12, 1889. (5). " "
" Sept. 13, 1889. (Several). (Hendrickson) "
Long Island. Sept. 15, 1889. (J. G. Scott) "
Good Ground, L. I. Sept. 11, 1890. (Perkins) "
Montauk, L. I. About Sept. 14, 1891. (Scott) "
" Sept. 16, 1891. (12). (Scott) "
Good Ground, L. I. Aug. 3, 1893. (1). (Perkins) "
Lockport, N. Y. Oct. 2, 1879. (Louis Hill). J. L. Davison
Oswego co., N. Y. tv, rare. Several times in 25 years. D. D. Stone
Rensselaer co., N. Y. Once taken. tv. F. S. Webster
Brockport, N. Y. May 8, 1887. David Bruce
Cooper, Wyoming co., N. Y. About 1896. James H. Savage
Canada, south bank St Lawrence river. Aug. 25–Sept. 15. Dr T. B. Heimstreet
Near New York, a few

Numenius arquatus (Linnaeus)

European Curlew

Scolopax arquatus Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 145
Numenius arquatus A. O. U. Check List. Ed. 2. 1895. Hypothetical List, No. 11, 1

arquā'tus, Lat., bent, or bowed, referring to the bill

This species resembles the Long-billed curlew in size and shape, but is of a *grayish*, rather than of a buffy or rufous color, and the *rump is white*.

A single specimen of this palearctic species was obtained on Long Island in 1853, and is now in the State Museum collection [*see* N. Y. State Mus. 7th Rep't, p. 17; *also* Marshall, Auk, 9:390]. This record was regarded by the A. O. U. committee as subject to some doubt, but Mr Dutcher and others who have examined the evidence regard the authenticity of the

specimen as fully established. Experts agree that the mount is from a fresh specimen and the taxidermist who had the bird and asserted that it was brought to him in the flesh did not know of its rarity. Its occurrence in America is, of course, purely accidental.

European curlew. Numenius arquatus (Linnaeus). Long Island specimen, State Museum. $\frac{1}{6}$ nat. size

Family CHARADRIIDAE

Plovers

Head, large, rounded; neck short; bill short for this order, being scarcely as long, or much shorter than the head, rather cylindrical and pigeon-shaped, being much compressed at the base and indented opposite the nostrils, and the hard terminal portion enlarged and convex and quite

distinct from the membranous portion; nasal groove short and wide, the nostrils appearing in it as an open slit; gape small; legs lengthened, tarsi longer than toes, mostly reticulate; middle and outer toes webbed at the base; hind toe usually wanting; wings long and pointed.

Plovers are birds of conspicuous black and white coloration, strong flight and whistling notes, sometimes mellow, sometimes piercing, but always far-reaching. They are somewhat gregarious in habits, but do not fly in such dense flocks as sandpipers. They run with ease and often indulge in peculiar antics especially at the breeding season. There are about 75 species of Plover distributed in all regions of the world, 8 of which are found in North America.

Vanellus vanellus (Linnaeus)

Lapwing

Tringa vanellus Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 148
Vanellus vanellus A. O. U. Check List. Ed. 2. 1895. No. (269)

vanĕl'lus, Lat. diminutive of *vannus*, fan, alluding to the wing strokes

Description. Bill slender, shorter than head; legs long; middle and outer toes webbed at base, inner toe free, hind toe small; wings very long, rounded, second to fifth primaries longest; primaries broad, the first three or four narrowed toward the tip; secondaries long and wide; long *tapering recurved crest;* plumage of upper parts iridescent; *top and front of head, throat and forebreast black; sides of head and neck, under parts and most of tail white, the latter with broad, black terminal band;* upper parts iridescent green, passing to bluish black on the wing feathers; bill black; legs red. Female slightly duller with shorter crest.

Lapwing. Vanellus vanellus (Linnaeus). From specimen in State Museum. ¼ nat. size

Length 13 inches; wing 8.5–9; tail 4; tarsus 2; middle toe 1; bill 1.

This famous palearctic species is still common in Europe in spite of the hundreds of thousands of its eggs which are sent yearly from the lowlands of

Europe to the larger city markets. It is occasional in Greenland but on the American coast is purely accidental. There are two records for New York State, the first a specimen taken at Merrick, L. I., about Christmas time, in 1883 [*see* Dutcher, Auk, 3: 438]. The second was shot at Watermills, L. I., late in the fall of 1905 [*see* Beebe, Auk, 23: 221].

Squatarola squatarola (Linnaeus)

Black-bellied Plover

Plate 39

Tringa squatarola Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 149
Squatarola helvetica DeKay. Zool. N. Y. 1844. pt 2, p. 214, fig. 180
Charadrius squatarola A. O. U. Check List. Ed. 2. 1895. No. 270

squata'rola, Ital., name of this species

Description. *Hind toe present* but small; tibia and tarsus reticulate; a basal web between outer and middle toes. *Summer:* Upper parts varied with blackish and ashy white; forehead, sides of the head above the eye, sides of neck, and forebreast, lining of wings, lower belly and under tail coverts white; sides of head below the eye, *throat, foreneck, breast, belly and axillars black;* primaries blackish, central part of their shafts and bases of inner webs white; upper tail coverts mostly white; tail white barred with dusky; bill and legs blackish. Female similar, but duller. *Winter: Upper parts dusky, profusely speckled and edged with grayish white;* under parts whitish streaked or spotted with grayish brown on the foreneck, breast and sides; primaries, axillars and tail as in summer. *Young:* Similar, but spotted above with yellowish white.

Length 10.5–12.25 inches; extent 24–25; wing 7–7.5; tail 3; tarsus 2; middle toe and claw 1.33; tibia bare 1; bill 1–1.25.

Migration. This holarctic species breeds in high latitudes and migrates southward in winter to nearly all parts of the globe; in America wintering from Florida to Argentina. On Long Island it is a common transient visitant, arriving in spring from the 5th to the 15th of May, passing northward from the 1st to the 8th of June, and returning from the 12th to the 31st of July, leaves for the south from October 15th to November 10th. Along the Great Lakes and other inland waters, it is less common than along the coast, but is a regular migrant in the fall, appearing from the 20th of August to the 5th of September and disappearing from the 15th to the 30th

of October. There are few spring records for western New York, the flight passing rapidly over, about the last of May. On the first of June 1895, a large flock of these birds in company with turnstones, sanderlings and Semipalmated sandpipers, visited Canandaigua lake, and similar visitations are occasionally reported from Lakes Erie and Ontario.

The Black-bellied, Whistling, or Gray plover is well known to the gunners of the Long Island coast, who also call it Beetle-head and Bull-head plover. Though larger than the Golden plover, its flesh is inferior, probably from the fact that it frequents the muddy shores and feeds on marine insects, while the Golden plover is more often found in the dry fields, feeding on berries and grasshoppers. The plaintive whistle of this plover is often heard high in the air in migration time when the birds themselves are quite beyond vision. It is a louder, shriller whistle than that of the Golden plover, consisting of several notes, the second prolonged and receiving the greatest accent. They are shy birds, very difficult to approach, or to decoy within range. Their flight impresses one with the idea of strength and sufficiency. Time and distance seem of little account to this bird as he starts for fresh feeding grounds, or leaves the shores of Lake Ontario for his journey to Hudson bay.

Charadrius dominicus Müller

American Golden Plover

Plate 39

Charadrius dominicus Müller. Syst. Nat. Sup. 1776. p. 116
Charadrius virginianus DeKay. Zool. N. Y. 1844. pt 2, p. 213, fig. 178
Charadrius dominicus A. O. U. Check List. Ed. 2. 1895. No. 272

charā'drius, Lat., plover; *domi'nicus*, Lat., of St Domingo

Description. Bill rather short; legs moderate; wings long; no hind toe; legs reticulate with hexagonal scales. *Summer:* Upper parts black spotted and margined with golden yellow and whitish, most strongly on the crown and back; forehead, line on side of head above the eye extending down the neck and sides of breast white; entire under parts black; tail gray, barred with dusky; *axillars and lining of wings ashy;* primaries blackish, central parts of their shafts and basal part of inner webs white; bill black; legs dusky bluish. *Winter:* Upper parts fuscous, spotted and barred with

light yellow and whitish; under parts dingy whitish dimly barred with brownish gray.

Length 10–11 inches; extent 22–23; wing 6.85–7.4; tail 3; tarsus 1.75; middle toe and claw 1.2; bill .8–1.

Range and migration. This species breeds in arctic America and winters from the gulf coast to Patagonia, being a representative of the several shore birds which migrate down the Atlantic coast in autumn and return to their arctic breeding grounds by way of the Mississippi valley, undoubtedly as Professor Cooke believes, because the Labrador coast is teeming with food in the fall, but is icebound in the spring, while the reverse is true of the inland route. It is rare everywhere in New York during the spring migrations, but Giraud speaks of it as arriving on Long Island in the latter part of April. Langille, likewise writes of it as arriving in western New York the latter part of April and soon passing on to the north. The only authentic records for recent years, I find in Mr Dutcher's Notes; a single bird on Shinnecock bay, April 7, 1882, and 2 birds reported by Mr Hendrickson, May 10, 1885. During the fall it was, until recently, common locally on eastern Long Island as well as along the St Lawrence, Lake Champlain, Lake Ontario and Lake Erie, especially near the mouth of Niagara river on the plains some distance back from the lake, where it occurred in flocks of hundreds the latter part of August and early September and was killed in large numbers. It is evident from Mr Dutcher's Notes that as early as 1882 this species had greatly decreased in numbers on Long Island. In 1886 several observers reported flights on August 24 and 25, one observer seeing five flocks. In 1887 Mr Hendrickson reported 25 on September 12. On September 1st, 1888, a large flight was reported at Oakdale, L. I. [*see* Forest and Stream, 31. No. 8]. This flight was accompanied by a strong southwest wind. On September 9, 1889, Mr Perkins reported, "a big bunch of greenbacks going west very high." August 3d, 1893, several bunches of greenbacks were reported along the coast. These flights were often preceded by northeast winds. The fall migration begins from the 1st to the 10th of August, rarely as late as the 24th, and ends about the middle of October, a few remaining sometimes as late as November

12th. In the interior of New York the decline of the Golden plover is even more marked than on Long Island, but a few still occur each season, the migration beginning from the 20th of August to the 5th of September, and ending from the 15th to the 28th of October, or rarely the 8th of November.

The Golden plover, Green-back, or Frost bird, is one of our most highly prized game birds. After the first sharp frost of autumn they usually occur in the greatest numbers, being fat and well-flavored from a continued diet of berries and grasshoppers. In a rolling country they can be stalked by the sportsmen, but along the coast are usually shot over decoys, often responding easily to an imitation of their whistle. When a flock is approaching the decoys, all the birds seem to be whistling at the same time, their note resembling the syllables, *coodle*, *coodle*, *coodle* [Mackay, Auk, 8: 17–24]. On the feeding grounds they run rapidly in quest of food, suddenly stopping after a short run, in the manner of plovers in general, and stand erect in graceful pose. When flying from one part of the field to another they utter their mellow whistling note and alight with upstretched wings to scatter immediately in further search for food.

Oxyechus vociferus (Linnaeus)

Killdeer Plover

Plate 39

Charadrius vociferus Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 150
DeKay. Zool. N. Y. 1844. pt 2, p. 212, fig. 181
Aegialitis vocifera A. O. U. Check List. Ed. 2. 1895. No. 273

oxye'chus, Gr. ὀξύηχος, sharp-sounding, of high notes; *voci'ferus*, Lat., noisy, vociferous

Description. Wings long; tail long, rounded; bill slender; black band encircling the base of the neck, broadest in front, another below this across the breast separated from it by white or buffy white; a blackish stripe extending back from the sides of the bill below the eye; a black band from one eye over the front of the crown to the other eye, separating this from the base of the bill a white frontlet; throat white extending as a half collar around the back of the neck; a space behind the eyes white changing to buffy; thus when the bird is facing the observer, it presents *four black bands separated by white;* top of head and upper parts grayish brown; *rump,*

upper tail coverts, central portion of lateral tail feathers, and tip of central tail feathers *pale rufous*, or ocherous buff; central tail feathers and subterminal zone of lateral feathers blackish; lateral tail feathers largely tipped with white and the outside pair white on the basal half, with three or four dusky bars on the inner webs; under parts and lining of wings pure white; wing feathers dusky with their central portions largely white, running further back on the secondaries, thus forming a *conspicuous angular white wing stripe;* bill black; feet dull flesh color; eyelids orange-red. *Immature:* Similar but duller, and edged with rusty on the upper parts.

Length 9–11.5 inches; extent 19–21; wing 6–6.75; tail 3.5–4; tarsus 1.4–1.5; tibia bare .8; middle toe and claw 1.12; bill .7–.9.

Young Killdeer hiding

Photo by Guy A. Bailey

Range and migration. The Killdeer plover inhabits temperate America as far north as Manitoba and Newfoundland, wintering from the Middle States to the West Indies and northern South America. It is a common summer resident in the interior of New York State, especially in the western and central parts. In the lower Hudson valley it is practically unknown as a summer resident, and on Long Island it is very rare, though apparently not unusual in Giraud's time. As a migrant it is fairly common in some seasons on Long Island and in eastern New York, appearing from the

1st to the 15th of March, usually passing north from the 15th to the 30th of May, returning from the 10th to the 30th of July, and departing from the 1st to the 15th of November, rarely lingering into December or later. In western New York it arrives from the 4th to the 20th of March and departs about the last of October.

Habits. The Killdeer, or Killdeer plover, is well known throughout the country which drains into the Great Lakes, inhabiting the pastures, newly plowed fields, and the shores of our lakes and streams. Its nest is usually farther from water than that of the Spotted sandpiper and is often found on upland fields, or pastures, a long distance from any stream. They feed largely on grubs and grasshoppers, but are not seen in such grassy fields as the Bartramian sandpiper. When a flock of killdeers are feeding, they are in full view. Hence the close cropped pasture is their favorite resort. They visit some bar or lake shore at night, or morning and evening, to drink and feed and sport along the shore; thus there is usually a regular flight of killdeers two or three times a day between the fields and the water side. They are noisy birds, keeping up a continual screaming and chattering when at play. When flying also, they call *kill-dee, kill-dee* at frequent intervals; and in the breeding season, the male circles around his chosen fields with measured flight and incessant reiteration of his shrill voiced love song. While flying about in sport they occasionally rush headlong downward through the air, with quivering, swirling flight, uttering at the same time a rattling torrent of high pitched notes. A similar vocal performance is frequently executed when they are running along the ground, usually with upstretched wings. This happens when several birds are together, and is accompanied by a ducking and chasing about among the troop, reminding one slightly of the intricate dances of the Brazilian lapwing, as described by Mr Hudson.

The Killdeer runs nimbly and swiftly with its wings well folded above its tail, the head gathered in, the tail straight and the whole body slightly inclined forward. After proceeding a few yards it suddenly stops, stands erect and looks about. Its food is seized with a ducking motion and swallowed directly. As they feed almost entirely on insects which are injurious

to the agriculturalist, they must be regarded as a beneficial species. The dozens of stomachs of killdeers which I have examined contained smooth caterpillars, beetles, grasshoppers and a few water insects. On account of its beneficial and interesting habits, as well as its small size of body, and the inferior quality of its flesh, this bird should be removed from the list of game birds and left to enliven the landscape with its sprightly voice and manners, and to assist the farmer in the destruction of noxious insects.

Photo by James H. Miller

Killdeer's nest and eggs

The eggs of the Killdeer are laid in a slight depression sparsely lined with bits of straw and pebbles, usually in a pasture, cornfield or fallow. The old bird leaves the nest while danger is yet afar off, provided the danger is of human kind, but when cattle or horses come near the nest she makes a great disturbance as if to drive or lead them away. A young friend of mine once found a Killdeer's nest while riding across a common, the old bird fluttering and screaming about his horse's feet so fiercely that he dis-

mounted and discovered the eggs. The following day I visited the locality to photograph the nest, but although I had received careful directions no bird or eggs could be found. The next day I returned with more explicit directions and walked directly to the eggs, but although they were quite warm no bird was seen. The few nests which I have found were discovered by coming suddenly over a rise of ground and starting the old bird before she had had time to steal away. The eggs are four in number, pyriform in shape, of a dull creamy buff, thickly speckled and blotched with black and blackish brown, the dimensions averaging 1.5 x 1.05 inches.

Aegialitis semipalmata (Bonaparte)

Semipalmated Plover

Plate 30

Charadrius semipalmatus Bonaparte. Nat. Sci. Jour. Phila. 1825. 5: 98
DeKay. Zool. N. Y. 1844. pt 2, p. 208, fig. 179
Aegialitis semipalmata A. O. U. Check List. Ed. 2. 1895. No. 274

aegialī'tis, Gr. αἰγιαλίτις, long-shoreman, worker by the beach; *semipalmā'ta*, Lat., partly webbed

Description. *Bill short; outer and middle toes webbed to the second joint;* tail shorter than the Killdeer's, less rounded; *upper parts*, including center of tail coverts and tail feathers *brownish gray;* outermost tail feathers white; other tail feathers with subterminal zone of blackish; a *black ring around* the base of the neck; throat *white* extending in a *collar around the neck* in front of the black ring; a white frontlet surrounded by the black band extending over the forecrown from eye to eye, and a *black stripe extending over the base of the bill and underneath the eyes; under parts white;* white wing stripe less pronounced than the Killdeer's; bill black at tip, orange at base; eyelids bright orange; legs pale flesh color. *Winter and young:* Have the black mostly replaced by brownish gray, the latter with buffy white edgings above.

Length 6.5–7.8 inches; extent 15–16; wing 4.7–5; tail 2.25; tarsus .9–.95; middle toe and claw .9; bill .5.

Range and migration. This species breeds from Labrador to the arctic coasts of America and winters from the West Indies and Gulf States to South America. In New York it is a common transient visitant, arriving

on Long Island from the 19th of April to the 12th of May, and passing northward from the 25th of May to the 5th of June, returning from the 1st to the 15th of August and departing for the south from the 25th of September to the 15th of October. On our inland waters it is less common than on the coast, but occurs regularly from May 10th to 30th and from August 1st to September 30th. It is common along the Great Lakes and the shores and marshes of the central lake country.

The Semipalmated plover or American ring-neck, at first sight suggests to the beginner in bird study a diminutive Killdeer, but it is much smaller, has a shorter bill and tail, and lacks the ocherous rump and the second belt on the breast. It is more of a beach bird than the Killdeer. When it first arrives on our shores and has not yet learned the ways of our pot hunters and young sportsmen, it is so unsuspicious that one may approach within a few feet of it. While visiting the mud flats in August, I have sometimes thought them entirely deserted, and have stood looking into the distance in search of migrants, when suddenly I became aware that these gentle little birds were all about me. While motionless they were quite unnoticeable, but as soon as one of them ran swiftly along with its peculiar ploverlike gait, he became clearly visible. While running the white of the plumage made them conspicuous against the dark ground, but when motionless the white seemed merely to break up their shapes and their brownish gray backs were merged in the background. They seemed so soft and chubby and unsuspicious as they trotted about my feet, feeding on their insect fare, that, although they were legal game, it would have been like making war upon babes and innocents to shoot them. Chapman says:

"Their simple, sweet, plaintive call is one of the most characteristic notes heard on our shores. At noonday, when the heat waves are dancing over the marshes and even the twittering oxeyes are silent, one may hear the *cool*, pure notes of this little plover. They may be written as in the accompanying text figure; a third shorter note is sometimes added. Even a whistled imitation of them takes me to the beaches."

Aegialitis meloda (Ord)

Piping Plover

Charadrius melodus Ord. Edition of Wilson's Ornithology. 1824. 7: 71
DeKay. Zool. N. Y. 1844. pt 2, p. 210, fig. 177
Aegialitis meloda A. O. U. Check List. Ed. 2. 1895. No. 277

melō'da, Lat., melodious

Description. Upper parts *pale whitish ash;* primaries dusky with white middle sections; secondaries and greater coverts mostly white; base of tail and its outermost feathers white, others with blackish terminal portions, slightly tipped with white; a *black belt, usually broken* on the center of jugulum and narrow on back of neck, being widest on sides; a short black band on the forecrown, not reaching from eye to eye; *frontlet, throat, collar* and *under parts pure white;* legs and base of bill yellow or orange; terminal half of bill black; eyelids orange. This is the *whitest of our little plovers.*

Length 6.5–7.5 inches; extent 14; wing 4.5–4.75; tarsus .85–.95; middle toe and claw .75; bill .45–.48.

Piping plover. Aegialitis meloda (Ord). Specimen from Lake Ontario now in State Museum. $\frac{2}{3}$ nat. size

The Piping plover, Pale ring-neck, Beach-bird, or Beach-flea inhabits the eastern United States, breeding as far north as the Gulf of St Lawrence and Manitoba, and wintering from Carolina and the gulf coast to the West Indies. In New York it is threatened with extirpation. Though it was common along the south and east coasts of Long Island in Giraud's time, it is now practically limited as a breeding species to Gardiners island, Ram island and similar localities in eastern Suffolk county. It undoubtedly bred in former years along Lake Erie and Lake Ontario, and Mr Todd found several pairs nesting at Presque Isle, Pa., in 1900, but I can find no definite breeding record for western New York.

The following records from the interior of New York are before me.

Owasco Lake. Fall 1876. Birds Cen. N. Y. p. 30
Lockport, N. Y. Aug. 20, 1885. J. L. Davison

Onondaga co., N. Y. Sept. 1886. Morris Green
Ossining, N. Y. 1898. A. K. Fisher
Lake Ontario, N. Y. Occasional migrant. David Bruce
Lake Ontario, N. Y. May 10, 1900. (♂ "*circumcincta*"). George F. Guelf

Mr Chapman found 10 or 12 birds living on Gardiners island in the summer of 1893 [*see* Bird-Lore, 5: 182], and Mr Bruen saw five there in June 1904 [*see* Wilson Bul. 50. p. 18]. In 1883, Mr Dutcher, with Nelson Verity, hunted over a great extent of Jones' beach at South Oyster Bay, for nests of this bird, but although a number of birds were seen, no eggs could be found. On May 30th, 1887, he found a pair evidently nesting on a shelly flat at Amityville beach. Mr W. W. Worthington, in 1900, wrote that both the Piping plover and the belted variety breed in the vicinity of Shelter island. Specimens of the Belted piping plover have been taken also at Rockaway and on Shinnecock bay [*see* Eagle, N. O. C. Bul. 3: 94; and (Lawrence), Dutcher, Auk, 2: 37]. This variety which was christened circumcincta by Ridgway is now regarded only an instance of individual variation in A. meloda. From Dutcher's Notes, supplemented from those of Worthington, Helme, Braislin and Howell, it is evident that the Piping plover arrives from the 3d to the 24th of March, rarely appearing as late as the 12th of April; and departs for the south between the 1st and the 20th of September. Nesting dates range from the 3d to the 10th or 20th of June and the 4th of July. The eggs are laid on the bare sand or bits of broken shells and pebbles, are four in number, creamy white, sparingly speckled with blackish and obscure lilac. Their dimensions average 1.25 x .95 inches.

Mr Langille describes the Piping plover's note as follows: "Its tone has a particularly striking and musical quality. *Queep, queep, queep-o*, or *peep, peep, peep-lo*, each syllable being uttered with a separate, distinct, and somewhat long-drawn enunciation, may imitate its peculiar melody, the tone of which is round, full, and sweet, reminding one of a high key on an Italian hand organ or the *hautboy* in a church organ. It is always pleasing to the lover of Nature's melodies, and in the still air of the evening it is very impressive."

Ochthodromus wilsonius (Ord)

Wilson Plover

Charadrius wilsonia Ord. Wilson's Ornithology. 1814. 9: 77, pl. 73, fig. 5
DeKay. Zool. N. Y. 1844. pt 2, p. 211, fig. 176
Aegialitis wilsonia A. O. U. Check List. Ed. 2. 1895. No. 280

ochtho'dromus, Gr. ὄχθος, bank, δρόμος, running; *wilson'ius*, in honor of Alexander Wilson

Description. *Bill rather long, stout;* tail nearly square; upper parts pale brownish gray; band on the forecrown and belt across the forebreast black; loral stripe blackish; primaries and central tail feathers blackish; frontlet, line over the eye, throat, collar around the neck, entire under parts, and outer tail feathers white; the latter marked with dusky toward the ends; *nape and sides of occiput tinged with ocherous* next the white collar; legs flesh-colored; eyelids uncolored; bill black.

Wilson plover. Ochthodromus wilsonius (Ord). From specimen in State Museum. $\frac{3}{4}$ nat. size

Length 7.25–8 inches; wing 4.5-5; tail 2; tarsus 1.1-1.2; middle toe and claw .9; bill .8-.9.

The Wilson plover was never common on the coast of this State and although DeKay speaks of it as breeding, there seems to be no definite record of its nest and eggs ever having been found in New York. The following are the records of its occurrence for the last 60 years:

Flatlands, L. I. Collection of L. I. Hist. Soc.
Penn Yan, N. Y. Spring 1868. Birds Cen. N. Y. p. 30
Rockaway, L. I. July 1, 1872. Lawrence, Forest and Stream, 10: 235
Buffalo, N. Y. Rare migrant. Bergtold, Birds of Buffalo, 1889. p. 9
Far Rockaway, L. I. May 17, 1879. (♀). Lawrence, Auk, 2: 273; Forest and Stream, 12: 348
Good Ground, L. I. May 28, 1879. (♀). Dutcher, N. O. C. Bul. 4: 242; 5: 186
Oneida Lake, N. Y. 1880. Ralph & Bagg, Birds of Oneida County, p. 115
Shinnecock bay, L. I. May 15, 1884. (♀). Dutcher, Auk, 3: 438

This species can be regarded only as an accidental summer visitant on our shores. It is a maritime species, inhabiting the coast of America from Long Island and southern California to Peru and Brazil.

Family ARENARIIDAE

Turnstones

Bill shorter than head, constricted at base, somewhat concave above the nostrils, slightly bent up, and tapering from the middle to a rather sharp point; nasal groove broad and shallow, similar to plover; legs rather short and stout, scutellate in front; toes free, very narrowly margined, the hallux large for this order, reaching the ground; wings long and pointed; tail short, slightly rounded; plumage pied or somber.

The turnstones are a family of three or four species, evidently related to plovers and oyster catchers. Our single species and its European representative are of holarctic distribution and perform extensive migrations. Their common and scientific names refer to the habit of turning over stones in search of insects for which occupation their bill is admirably fitted.

Arenaria interpres morinella (Linnaeus)

(Arenaria morinella on plate)

Ruddy Turnstone

Plate 33

Tringa interpres Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 148. (Part)
Strepsilas interpres DeKay. Zool. N. Y. 1844. pt 2, p. 216, fig. 182
Arenaria interpres A. O. U. Check List. 1895. No. 283

arenā'ria, Lat., pertaining to sand; *intĕr'pres*, Lat., interpreter

Description. *Upper parts varied* with chestnut or bright *rufous, black and white;* top of head buffy white streaked with blackish, remainder of *head, neck and forebreast pied black and white,* black predominating on the chest and extending down the sides of breast; rest of *under parts, lower back, and longer tail coverts white;* subterminal zone of the tail black; base and narrow tip of tail white; primaries blackish, white toward the base of middle web; inner secondaries white; greater coverts tipped with white; bill black; feet *orange-red. Female:* Similar, but most of the rufous replaced with grayish brown, the black less intense. *Winter and young:* The chestnut wanting, and the black mostly replaced by brown and gray.

Length 8.5–9.8 inches; extent 16–19.25; wing 5.5–6; tail 2.6; tarsus 1; middle toe and claw 1–1.1; bill .8–.9.

This is the American representative of the common turnstone of the palearctic region which also reaches Greenland and Alaska. Our species breeds from Hudson bay to the Mackenzie delta and migrates southward to the Gulf States and South America. It is a common transient visitant along the coast of New York arriving in the spring from the 1st to the 15th of May, passing northward from the 1st to the 10th of June, returning from the 23d of July to the 8th of August, and departing for the South between September 20th and October 5th. In the interior of the State it is much less common than along the coast, but is noted almost every season somewhere in western New York between the 20th of May and the 5th of June. In the fall it is no commoner than in the spring, occasionally appearing in August and September and once on October 6th. On June 1, 1895, I witnessed a flight of hundreds of these birds in company with Whistling plovers, sanderlings and other shore birds on Canandaigua lake in Ontario county. The island bar was overcrowded with them and it was impossible to take a pair of turnstones with the shot-gun without killing a dozen others and a few Black-bellied plovers, and sanderlings and sandpipers at the same time. This was an unusual occurrence and the birds were undoubtedly forced to alight by the strong wind which had been blowing for several hours previously. On the Great Lakes they usually occur singly, in pairs, or in small companies.

The Turnstone, Calico-back, Brant-bird, Horse-foot snipe, Heart-bird, Beach plover, and Sea quail as this species is called, from its habit of rolling over stones in search of the small crustaceans beneath, or from the patch-work appearance of its upper parts, or from its simultaneous appearance with the flight of brant, or from its fondness for the spawn of the horseshoe crab, or from the black heart-shaped marking on the chest, is primarily a beach bird and a maritime species, evidently visiting our inland stations when taking a short route from the Atlantic coast to Hudson bay.

Family HAEMATOPODIDAE

Oyster-catchers

Large; bill twice as long as head, much compressed, sharp edged, truncate, contracted above the nostrils; legs stout, reticulate; toes with thickened

lateral membrane, and the middle and outer webbed at the base; no hallux; plumage pied, commonly in large dark and white areas; bill and feet bright colored; habitat maritime; food largely mollusks which they open or dislodge with their wonderfully constructed beaks.

Haematopus palliatus Temminck

American Oyster-catcher

Haematopus palliatus Temminck. Manuel d'Ornithologie. 1820. 2: 532
DeKay. Zool. N. Y. 1844. pt 2, p. 217, fig. 183
A. O. U. Check List. Ed. 2. 1895. No. 286

haemă'topus, Gr. αἱματοπῶς, red-footed; *palliā'tus*, Lat., cloaked, or wearing a pallium

Description. Large; *head, neck, upper breast shiny black; back,* wing coverts, rump, and central tail coverts *smoky brown;* primaries and terminal portion of tail blackish; part of secondaries, lateral and longer tail coverts, base of tail and *under parts white; bill,* eye ring and eyes *red;* feet pale purplish.

Length 17–21 inches; extent 30–36; wing 9.8–10.25; tail 4; tarsus 2–2.5; middle toe and claw 1.75; bill 2.9–3.75; depth of bill in front of nostril .5.

American oyster-catcher. Haematopus palliatus Temminck. From specimen in State Museum. ¼ nat. size.

This species inhabits temperate and tropical America from New Jersey and Mexico to Chili and Brazil. It rarely wanders up the coast to Long Island, Cape Cod and the coast of Maine. In the days of DeKay and Giraud, it was evidently more common on the coast, as Giraud speaks of obtaining them singly

or in pairs on the south shore of Long Island between Raynor South and Babylon. Our only definite records are as follows:

New York harbor, N. Y. May 28, 1877. Robert Lawrence, N. O. C. Bul. 5: 117
Pouquogue, L. I. Mar. 9, 1880. Dutcher, Auk, 10: 272
Greenport, L. I. June 2, 1882. Dutcher, Auk, 3: 439
Long Island, Lawrence Collection 3166. Am. Mus. Nat. Hist.
Also a specimen in the collection of Long Island Historical Society, from Long Island

The Oyster-catcher is more strictly a maritime species than any other of our shore birds and nearly rivals the Sickle-bill curlew in size, but is not held in great esteem as a game bird. They frequent the bars and beaches, feeding on marine insects, small crabs and bivalves which their knifelike bill is admirably fitted to open.

Order GALLINAE

Gallinaceous birds

This order (Galliformes, Sharpe's Hand-List) is well exemplified by the common barnyard fowl. The bill is short, stout and convex, the tip vaulted and obtuse, its texture horny throughout, the nasal fossae covered by feathers or scales, the edges of the upper mandible overreaching the lower, the ridge of the culmen high and dividing the frontal feathers. The legs are stout and moderately long, feathered to the heel or farther in some families, the tarsus scutellate or feathered, the front toes webbed at the base, the hallux elevated and rather small except in guans or megapodes. The wings are short, rounded, arched and strong. Cranium small. Body heavy. Plumage aftershafted. Fifth cubital present. Palate schizognathous. Nasals holorhinal. Cervicals 16. Sternum deeply two-notched. Furculum or "wishbone" with a hypocleidium. Pectoral muscles three, the second very large. Coeca long. Crop large. Gizzard very muscular. Gall bladder present. Physiological nature praecocial and ptilopaedic. Eggs numerous and large. Mating habits polygamous. Feeding habits chiefly terrestrial and largely rasorial. Flesh mostly edible, and light-colored in most of the families. This order includes the megapodes (28 species) of Polynesia, etc.; the guans and curassows (59 species) of tropical

America; and the *Phasiani*, comprising the turkeys (four species) and toothed partridges (70 species) of America; the Guinea fowls of Africa (23 species); the pheasants, francolins, true partridges and quails of the Old World (240 species) and the grouse of holarctic distribution (45 species and subspecies).

Family ODONTOPHORINAE

American Partridges, "Quails"

Size rather small; head completely feathered; nasal fossae not feathered; nostrils covered with a naked scale; tarsi and toes naked; tarsi scutellate; toes scarcely or not at all fringed; edges of under mandible toothed; tail of 12 feathers, rarely 10 or 14. This family of about 70 species is confined to the new world, probably being of neotropical or Sonoran origin, but resembling the Perdicinae, or Old World Partridges. They are well represented in the southwestern United States and in tropical America, but only one species is found in the Eastern States. This is our well known Bobwhite.

Colinus virginianus (Linnaeus)

Bobwhite

Plate 40

Tetrao virginianus Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 162
Ortyx virginiana DeKay. Zool. N. Y. 1844. pt 2, p. 202, fig. 168, 169
Colinus virginianus A. O. U. Check List. Ed. 2. 1895. No. 289

colī'nus, of uncertain origin, probably from the Mexican; *virginiā'nus*, of Virginia

Description. Upper parts varied with chestnut, gray, rusty and black. *Male:* Throat white, margined all around with blackish; a white line from the forehead over the eye and down the sides of the neck; sides and back of neck with dashes of white; under parts grayish white, wavy barred with blackish; sides broadly streaked with rufous or brownish red; tail feathers bluish gray. *Female:* Somewhat smaller and duller; the throat and superciliary stripe buffy or brownish yellow. Bill blackish; feet brown.

Length 9.5–10.75 inches; extent 14.5–16; wing 4.25–4.75; tail 2.4–2.9; tarsus 1.2–1.5; middle toe and claw 1.3–1.35; bill .55–.65.

Distribution. The Bobwhite, or Quail, was formerly well distributed throughout New York State as far north as the counties of Jefferson, Oneida, Saratoga and Washington, to an altitude of about 1000 feet, and in the southeastern portion, to an altitude of 2000 feet. At the present day it

is a rare bird in all portions of the State, excepting Long Island, the lower Hudson valley, and the Delaware valley. Numerous importations of southern or western birds have done little, if any, permanent good in restoring its former abundance. Every year we hear of broods of bobwhites reared in western or central New York and the Upper Hudson valley, but the severity of our winters, and the depredations of cats and other predacious animals, and the persecution of gunners and pot hunters, combine to keep the birds continually in check.

Haunts and habits. The Bobwhite prefers open fields of grass or stubble or fallow, with brushy coverts near at hand as a refuge from the storm and from its enemies. They are wholly beneficial in habits, in the spring and summer partaking largely of insect diet and in the fall and winter of weed seeds and waste grain. In May the male mounts some fence post, stone or other elevated object, and whistles his familiar *Bob-white*, or *Ah, Bob-white*, which is variously translated by the country people into "*more wet,*" or "*no more wet;* "or "*pease most ripe,*" and "*Buckwheat,*" or "*Good buckwheat.*" In the mating season the cocks often fight fiercely but they are not polygamous and the male helps at incubation, sometimes continuing in charge of the nest and young when the female has been accidentally killed. The nest is placed upon the ground under a small bush, or bunch of grass, or in a briar patch, or beside the fence between cultivated fields. It is composed of dry hard grasses and bits of grain stubble. The eggs are from 10 to 18 in number, pure white in color, and pyriform in shape, being quite pointed at the smaller end. Occasionally as many as 37 eggs have been found in one nest, undoubtedly the laying of two or more hens. The time of incubation is about 24 days [Bendire]. The young follow their mother from the nest in a day or two after hatching. They are covered

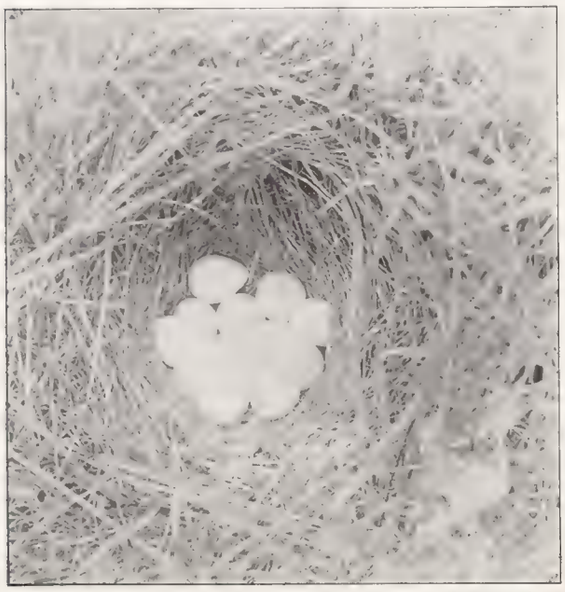


Photo by L. S. Horton
Bobwhite's nest and eggs

with chestnut and buff down and are very expert in lying concealed among the grass and leaves at a warning note from their mother. A second brood of young is sometimes reared but this is certainly not the rule in our latitude. After the nesting season they gather in coveys of 12 to 30 birds and remain in company till the following spring. They roost upon the ground, gathered in a small circle, each one facing outward, and, if disturbed, each one springs upward and outward with a startling whirr, all going in different directions, so that the enemy, whether it be cat or fox or owl or man, is so disconcerted that their escape is assured. After a covey has been flushed they usually alight again within 20 or 30 rods, and its scattered members begin to call to each other, especially if it be late in the afternoon, in a softly whistled *quoi-ree*, *quoi-ree*, until the family is reunited. I have often followed the history of a covey of bobwhites through the winter as told by their tracks in the snow. As weeks advance their numbers gradually decrease, and their roosting spot is often changed, to escape from some wandering cat, or hovering owl which has discovered their retreat. Sometimes a Cooper hawk, or a Goshawk, remains in the vicinity and takes his toll from the flock whenever they venture from the thick coverts for the food which becomes more and more necessary as the cold and snows of winter oppress them. Those coveys which winter in swamps where there is shelter in the tall grass from the snow and sleet, and where they are less liable to be crusted over, usually survive the best, but they are running the risk of wholesale slaughter by minks and weasels if discovered. In a well cultivated country the quail have great difficulty in finding food when the ground is covered with snow, and I have often seen the bevy reduced to the necessity of feeding on the seeds of milkweed, burdock, and an occasional ragweed. When the ground is uncovered they pick up waste grain of all kinds, wild pease, trefoil, smart weed, sunflower, beech nuts, small acorns and small weed seeds of all kinds. They also partake of wintergreen, viburnum berries, and wild grapes. After reading the history of their dangers and hardships in the snow, one feels less inclined to hunt the Bobwhite for the table, although he surely is as delicious a morsel as any in the list of our game birds.

Protective measures. It is certain that bobwhites will never be common in our State without protection and encouragement. The southern and western birds which have been imported are not hardy enough to withstand our winters. In any case it would be well to furnish shelter and food for the birds during the winter months. Then, if they are protected from wandering cats and dogs, and gunners, they will increase until a hardy race is established. The Cooper hawk, Sharp-shinned hawk, and Goshawk should also be kept off the ranges; and, especially during the nesting season, or when the chicks are young, cats should not be allowed to roam the fields. If farmers and landowners generally would unite in these protective measures we feel confident that the Bobwhite would thrive again in New York as he did when our grandfathers were boys.

Family TETRAONIDAE

Grouse

Grouse have the tarsi more or less feathered, at least on the upper forepart. Some, like the ptarmigans, have the feet densely feathered to the nails. Those, like the Ruffed grouse, which have the feet naked are provided with a horny, comblike fringe on the sides of the toes. The nasal fossae are feathered; some have a naked, colored spot above the eye, and many a naked patch on the sides of the neck. The colors are subdued and blended. The tail consists of 16 to 20, or 22 feathers.

This is a family of about 25 species, besides the numerous subspecies, scattered through the holarctic realm, and especially well represented in North America. They are mostly birds of temperate and cold temperate regions, but the ptarmigans live throughout the arctic regions. Everything considered, grouse are the choicest game birds we have, like the Black cock and Red grouse of Europe, the Ruffed grouse and Prairie hen of America being famous alike for the sport which they offer in the field and the delicious quality of their flesh.

Canachites canadensis canace (Linnaeus)

Canada or Spruce Grouse

Plate 41

Tetrao canadensis Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 159
DeKay. Zool. N. Y. 1844. pt 2, p. 206, fig. 173
Dendragapus canadensis A. O. U. Check List. Ed. 2. 1895. No. 298

canachi'tes, Gr., χαναχέω, to make a noise, referring to the drumming; *canadĕn'sis*, of Canada; *canā'ce*, Gr., Κανάκη; *canace*, daughter of Aeolus, from καναχή, a noise

Description. Tarsi feathered to the toes; a bare orange spot above the eye; no crest or ruff; tail of 16 feathers. *Male:* Upper parts and sides wavy barred with black and gray; under parts extensively black with white feather tips; tail black with ocherous rufous or orange-brown tip. *Female:* Quite uniformly varied with ocherous, gray and blackish, the gray appearing as a veil cast over the ocherous and blackish bars; under parts with white feather tips. *Young:* Similar to female.

Length 15–17 inches; wing 7; tail 5.5. Hens smaller than cocks.

The Canada grouse, Spruce grouse, Spotted grouse or Spruce "partridge," is confined to the boreal life zone of North America. In New York it occurs only in the spruce, fir, and tamarack forests of the Adirondacks where it is a strictly resident species. It was formerly common throughout the tamarack and spruce swamps of the North Woods, but for many years it has become scarcer and scarcer, until it is now threatened with extermination in our State. On September 1st, 1879, Dr Merriam noted it as common on the Brown's Tract Still-Water, Herkimer county, and found it near Big Moose in 1880 and 1882. Mr Scott Brown of St Huberts showed me a fine pair which were taken in the swamp along the cold slough near the head of Upper Ausable lake, in the fall of 1904. Mr Miner of Saranac stated that only one specimen in many years had been brought to his place to be mounted. This grouse is so unsuspicious that when disturbed they alight in neighboring trees and the whole company may be shot down one after another without a single bird escaping. Thoughtless hunters have often accomplished this feat and afterward told of it as being an exploit of sportsmanship. As the species is of local occurrence in the Adirondacks, it is easy to see how this treatment has brought about its destruction. In

April and early May the males strut and drum somewhat after the manner of the Ruffed grouse, the sound resembling the distant roll of thunder. It is usually produced when the cock is fluttering up an inclined tree trunk or on a stump and from this elevation to the ground again, or sometimes by merely springing into the air for several feet and fluttering to the ground. The nest is placed on a slight elevation in the swamp beside a stump or beneath the low branches of a spruce tree and is constructed of slender twigs and leaves or blades of grass. The materials are added to every day as the laying progresses until a deeply hollowed structure is built up about the eggs, which are from 8 to 14 in number, rather pointed, of a rich buffy or pale brownish color, speckled and spotted with a rich chestnut and blackish brown, and average 1.72 x 1.25 inches in dimensions. The eggs are laid from the 5th to the 20th of May, and the period of incubation is recorded in Bendire's *Life Histories* as 17 days.

In summer and early fall the food of the Spruce grouse consists largely of berries and tender shoots of plants, and its flesh is well flavored, but in winter it feeds almost entirely on spruce buds and then the flesh becomes bitter and unpalatable.

Bonasa umbellus umbellus (Linnaeus)

Ruffed Grouse

Plate 41

Tetrao umbellus Linnaeus. Syst. Nat. Ed. 12. 1766. 1: 275
DeKay. Zool. N. Y. 1844. pt 2, p. 204, fig. 174
Bonasa umbellus A. O. U. Check List. Ed. 2. 1895. No. 300

bonā'sa, Gr. *βόνασος*, Lat. *bonasus*, bison, the drumming being likened to the bellowing of a bull; *umbĕl'lus*, poor Latin referring to the umbel, or umbrella, formed by the ruffs

Description. *Crested and ruffed;* the bare skin beneath the ruff apparently not distensible as in the Heath hen; tail as long as wings, somewhat doubly emarginate so that it is nearly half diamond shape when spread, of 18 broad truncate feathers; tarsi partly feathered in front; plumage beautifully blended with rufous brown, blackish, and gray; *ruffs black* or brownish black, with greenish or steel-blue iridescence; *tail rufous or gray with a broad subterminal band of blackish* and numerous small broken bars of the

same; under parts grayish or tawny white with broad obscure bars of dusky, becoming broad and blackish on the flanks. The hen is smaller, with shorter tail and ruffs. This species, like the Screech owl, exhibits a kind of dichromatism, some specimens having a prevailing rufous, or reddish brown color of the upper parts, especially the tail, and others a prevailing gray, which is not by any means confined to the subspecies togata, but is exhibited by southern birds as well, both types of color often occurring in the same brood.

Length 16–19 inches; extent 23–25; wing 7–8; tail 5.5–7; tarsus 1.5–1.6; middle toe and claw 1.75–1.9; bill about .6; weight 18–24 ounces.

Distribution. The Ruffed grouse was formerly common in every county of New York from Staten Island to Mt Marcy, but is now rare in the more thickly settled districts, and is probably extirpated from Richmond, New York and Kings counties. It is most abundant on the borders of the Catskills and the highlands of western New York, and in the outskirts of the Adirondack country. It is impossible to draw definitely the boundary between the Ruffed grouse proper (umbellus) and the Canadian ruffed grouse (togata), as there is a continual gradation from the birds of southeastern New York to those of the Adirondack forests, which are certainly of the subspecies togata. Birds from the highlands of eastern and western New York are intermediate between the two.

Haunts. The Ruffed grouse, or Partridge, as it is almost universally called in this State, and "Pheasant" further south, is a bird of the woodlands. It prefers rugged hillsides and a country broken with gullies and small streams, with a mixed growth of oak and pine, or of hemlock, beech, birch and maple. A suitable woods for grouse has dense undergrowth, and the birds frequent the borders of the forest, or the edges of openings and slashings. In the wooded portions of the State, grouse are much more abundant than in the settled districts, but even there they are most often found about the burnt tracts or recently lumbered districts, where there is both an abundant cover and a more plentiful supply of berries, tender plant shoots and insects than in the depths of the forest. In settled districts they are rapidly becoming uncommon, as their native coverts disappear, and are now found principally in the wooded swamps, gullies and hill slopes. In the fall, just before the trees drop their leaves, there is a dispersal of

grouse in all directions from the locality where they were reared. They then appear in unusual places and even enter the villages and cities. At this time of the year, many suppose that grouse become bewildered, and they certainly exhibit strange instincts at this season. Many instances are recorded of their having flown directly into cities and through plate glass windows or into houses in the country, or standing stupidly on the

Photo by James H. Miller

Ruffed grouse on nest

porch like tame chickens when people were about, or of alighting in trees over much frequented sidewalks and staring at people passing underneath, or being flushed from a garden or dooryard and flying directly against the side of a barn nearby. I am inclined to think that grouse at this season are not afflicted by any nervous disease, but have an instinct to wander into new localities, an impulse which is of great value to the species in restocking depleted coverts, and in introducing new strains of blood in

different localities, thus maintaining the vigor of the breed. I have seen grouse in the North Woods which were as heedless of man's presence as if they had been reared in a barnyard and when flushed would alight in the nearest tree and almost allow themselves to be knocked off with sticks. The so called "crazy grouse," like these birds, having entered surroundings with which they are wholly unfamiliar, have not yet adapted themselves to the new conditions.

Habits. Early in spring the cock grouse begins to strut and drum on some chosen log or mossy mound. When strutting he raises and spreads his ruff until it forms a circle about his head, and spreads his magnificent tail until it forms a semicircle above his back, then with drooping wings, he parades up and down his drumming log with all the conceit of a diminutive turkey cock. When he has displayed his charms for some time, without the expected appearance of an appreciative audience, he commences to drum, or, as in the case which I witnessed in the Upper Ausable swamp, he sits moping on the log, as if sleepy, or waiting, or wearied from his exertions, but presently becomes alert, raises his head, drops his tail, straightens his wings, fluffs out his breast feathers, and begins to beat the air with his wings, slowly at first, but with ever increasing rapidity, until there is visible only a mazy blur, extending from a horizontal to a vertical position at the bird's side, the wings evidently not striking each other or the log on which he stands, but as Professor Hodge suggests, the loose feathers of the sides and flanks may act as a pillow or resonance box to increase the hollow sound. The sound of the drumming carries a long distance through the forest and bears remarkable resemblance to the starting of an automobile engine when heard at a distance, beginning with two or three slow resonant thumps and rapidly increasing in speed till it becomes a continuous whirr. This is the signal to the hen that her lord is at the accustomed rendezvous. But the drumming is not heard merely in the springtime. Mr Scott Brown of St Huberts, informs me that he has heard it nearly every month in the year. In midsummer when the birds are molting, they rarely if ever drum, and in midwinter it is an unaccustomed sound, but in the sunny days of the fall, it is almost as familiar a woodland sound as in the spring-

time. I have also heard it on moonlight nights, and as early as half past three in the morning, the commonest times for the performance being at daybreak, in the middle of the forenoon, and the latter part of the afternoon. During the drumming period the action is repeated every few minutes.

Nesting. The usual time for the beginning of incubation is from April 20 to May 10, rarely as early as April 5th. The female chooses her nesting

Photo by James H. Miller

Ruffed grouse's nest and eggs

site at the foot of a tree or stump, or beneath a bush or small hemlock; scratches a slight depression and lines it with leaves, and deposits from 8 to 14 eggs of a buffy color, usually plain, but sometimes sparingly speckled with brown, averaging 1.5 x 1.18 inches in size. The period of incubation according to Bendire lasts from 24 to 28 days. The young follow the mother from the nest about a day after hatching and are extremely expert in hiding among the dead leaves at the warning note from the mother. She exhibits

the most acute distress when her chicks are in danger and flutters about or limps along as if with broken wing until she has lured the intruder away from her young, when she flies off into the forest and returns to her brood by a circuitous route. On two or three occasions when the mother grouse saw that her ruse was of no avail, I have actually been attacked by her and driven from the locality. She charges with ruffs and hackle feathers thrown high up like a mane about her head, her tail and wings spread, to beat the intruder with her powerful wing strokes. The young can fly when they are as large as small robins and soon learn to alight in thick trees and remain motionless while danger is near. The grouse utters a subdued *cluck*, and when startled makes a plaintive sound "resembling the whining of young puppies."

Food. When young they feed almost entirely on insects, being very fond of grasshoppers, beetles, ants and various kinds of leaf eating larvae. Late in summer they feed largely on berries of all kinds, the leaves of clover, strawberry and the tender shoots of plants, especially beech drops and the young leaves of wintergreen. In the fall they are fond of beech nuts, chestnuts, small acorns and haw berries, or the fruit of the Crataegus; and in winter subsist principally on the buds of birch, poplar, and apple trees, often traveling a distance of 50 or 100 rods to visit isolated trees late in the afternoon to feed on the buds. The grouse seems to be partial to leaves with pungent flavor, like wintergreen, mint, sorrel, birch, and various kinds of berries, which impart a peculiar gamey flavor to its flesh, and, it is said, when it has fed for some time on the mountain laurel, becomes bitter or even poisonous.

Roosting. When the chicks are young they sleep on the ground brooded by the hen, but when they are able to fly they roost in trees at a hight of from 8 to 20 feet, the more easily to avoid their numerous enemies. During the coldest weather I have found grouse roosting both on the ground and in dense pines or hemlocks, but in snowy and stormy weather they usually sleep in the snow, at the foot of a tree or stump, but not among the thick brush, and are frequently buried in the snow to a depth of several inches, as may be seen by examining the roosting holes which they have

left. I have seen grouse on a few occasions dive into the snow on a hillside or at the foot of a tree, and this seems to be their usual method of going to bed in the coldest winter weather, for, by studying the records in the snow, it is evident that they do not walk to their sleeping place but dive into it from a neighboring tree, a habit which undoubtedly saves

Specimens of Ruffed grouse, Bonasa umbellus, from New York State showing gradation from B. u. umbellus on the right (Bergen, Genesee county), to B. u. togata on the left (Upper Ausable lake). The intermediates are from Saratoga county and southern Ontario county.

them from being tracked by hungry foxes and weasels. When leaving their couch in the snow they come out two or three steps before taking wing, but if disturbed they spring directly out of the snow as I have seen them do on many occasions. In the coldest weather they remain in the snow until late in the morning, and in the worst weather perhaps for two or three days, in this manner being protected from the extreme cold. Some

observers have reported that grouse are occasionally crusted over while sleeping in the snow and are never able to escape, but this is certainly a rare occurrence in our State. With their powerful wings they can force themselves some distance through the snowbanks and in this manner often escape from birds of prey.

Enemies. The greatest enemies of the grouse are foxes, martens, minks, weasels, Great-horned owls, goshawks and Cooper hawks which capture both old and young birds. Chicks are destroyed by cats and crows, and often become victims of ticks and abdominal parasites. In cold, wet seasons the eggs hatch poorly and the young die from exposure. In well settled districts wandering cats are fully as great an enemy as gunners. I have known of a single cat which brought home, in one season, not less than 18 grouse, some of which were two thirds grown, and doubtless others were devoured in the field. Crows destroy the eggs whenever they can discover the nest, and skunks, weasels, and red squirrels are a continual menace during the incubation period.

If the Ruffed grouse is to be preserved in the more thickly populated districts the sportsman must abandon hunting it in these localities, and reserves of several thousands of acres with suitable food and cover should be established in various localities to serve as strongholds and propagating centers for the species. The Ruffed grouse is our finest game bird and it will be a disgrace if it be allowed to go the way of the Heath hen and Wild turkey.

Bonasa umbellus togata (Linnaeus)

Canadian Ruffed Grouse

Tetrao togatus Linnaeus. Syst. Nat. Ed. 12. 1766. 1: 275
Bonasa umbellus togata A. O. U. Check List. Ed. 2. 1895. No. 300a

togā'ta, Lat., togated, gowned, probably referring to the dark or gray suffusion of the plumage in this variety

Description. Ruffed grouse from northern Canada are easily distinguishable from those of the Middle Atlantic States by their much *darker* hue, especially the barring of the under parts, these *cross markings being quite dusky across the breast*, and *becoming* almost *black on the flanks*. The edges of each bar, even on the center of the breast, are blackish. There

is also a tendency to grayish rather than rufous on the upper parts and the tail is usually gray. Birds from the Adirondacks are nearly typical of this subspecies. In size they are the same as the subspecies umbellus.

As stated under the common Ruffed grouse, the birds from a large portion of New York State are intermediate between this subspecies and the preceding. It is practically impossible to assign many New York specimens to one subspecies or the other. The illustration on page 372, of typical New York birds will show the degree of darkness in the barring of the under parts, which is the most tangible means of distinction between them. The two varieties are identical in habits and their eggs indistinguishable.

Willow ptarmigan. Lagopus lagopus (Linnaeus). Specimen in summer plumage. American Museum of Natural History. $\frac{2}{3}$ nat. size

Willow ptarmigan. Lagopus lagopus (Linnaeus). Specimen in winter plumage. American Museum of Natural History. $\frac{2}{3}$ nat. size

Lagopus lagopus (Linnaeus)

Willow Ptarmigan

Tetrao lagopus Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 159
Lagopus lagopus A. O. U. Check List. Ed. 2. 1895. No. 301

lagō′pus, Gr. λαγώπους, Lat., *lagopus*, harefoot

Description. Feet completely feathered. *Winter:* Pure white with black tail. *Summer, male:* Head, neck and upper parts rich chestnut or rufous, more or less barred with blackish; wings and under parts largely white. *Spring and fall:* Showing various stages of pied plumage. *Female:* Lighter colored than summer male, more heavily barred, only the wings white.

Length 15–17 inches; wing 7.5–8; tail 5.5.

The Common or Willow ptarmigan is circumpolar in distribution, breeding in the arctic regions and wandering irregularly south in winter, in eastern America rarely to Maine, Massachusetts, New York, and Illinois. The only New York specimen known was obtained May 22, 1876, by Romeyn B. Hough at Watson in Lewis county, [*see* Coues, N. O. C. Bul. 3:41],

and Merriam [*Ibid.* 6:233]. A southward movement also occurred in 1897 when this species was taken on May 15th at Whitby, Ont. [*see* Ames, Auk, 14: 411].

Tympanuchus cupido (Linnaeus)

Heath Hen

Tetrao cupido Linnaeus. Syst. Nat. Ed. 10. 1758. 1: 160
DeKay. Zool. N. Y. 1844. pt 2, p. 205, fig. 175
Tympanuchus cupido A. O. U. Check List. Ed. 2. 1895. p. 306

tympanū'chus, Gr. τύμπανον, Lat. *tympanum*, membrane, and Gr. ἔχω, I have; *cupi'do*, Lat., Cupid, the neck tufts being likened to Cupid's wings

Description. Tarsi lightly feathered to the toes; a tuft of from 7 to 10 elongated pointed feathers on each side of the neck over the naked membrane, which is very distensible, in the mating season being inflated at will until it looks like a small orange; tail short, of 18 stiff feathers; breast meat dark; upper parts light reddish brown barred with dusky and buff: under parts white broadly barred with brown; chin, throat, cheeks, and stripe over the eye buffy.

Heath hen, Tympanuchus cupido (Linnaeus). From specimen in Vassar College Museum. ⅛ nat. size

Length 16 inches; extent 27; wing 8.35–8.6; tail 4. Female smaller; wing 8; darker and rustier.

The Heath hen is the Atlantic coast representative of the well known Pinnated grouse or Prairie hen of the western prairies. It formerly inhabited a considerable portion of the Atlantic States east of the Alleghanies, especially New Jersey, New York and Massachusetts, but is now confined to the island of Martha's Vineyard, where about 300 birds survive, and will undoubtedly increase under the determined protective measures which have been adopted by the Massachusetts Legislature. It was once common among

the scrub oaks and pine barrens of Long Island, but was "very nearly if not entirely extinct," in 1844, according to Giraud. The last specimen recorded from the State was shot at Comac Hills, in 1836 [*see* Dutcher, Auk, 10:272]. In early colonial days it evidently was well distributed in southeastern and eastern New York, for DeVries and Megapolensis speak of it as common at New Amsterdam and Fort Orange (Albany) in 1639 [*see* N. Y. Hist. Soc. Coll. Ser. 2, 3, 90, 150; also Munsell, Annals of Albany, 9:126].

By intelligent and persistent effort this fine bird could be reestablished on the plains of eastern Long Island.

Lyrurus tetrix (Linnaeus)

Black Grouse

Description. *Male:* Black with violet reflections, lower tail coverts, broad band in wing, tips of secondaries and small spot below the eye, white; naked eyebrow vermilion; tail lyre-shaped; feet feathered to the toes. Length 23 inches. *Female:* Above barred with rusty red and black; below dusky barred with red and whitish; tail emarginate, but not strikingly lyre-shaped.

The Black grouse, Black cock or Black game has been imported and liberated in the Adirondacks, especially on the preserves of Edward H. Litchfield at Tupper lake. There seems no reason why this fine grouse should not thrive in the North Woods, if protected and reinforced occasionally by fresh stock until it is well established.

Tetrao urogallus Linnaeus

Capercaillie or *Capercailzie*

Description. *Male:* Head and neck dusky; wings brown speckled with black; tail and belly black spotted with white; breast lustrous green; rump and flanks ashy, undulated with black; throat feathers elongated into a black beard; bare eyebrows red. Length 34 inches; weight 8 to 11 lbs. *Female:* One third smaller; barred and spotted with tawny red, black, and white; breast dark red; weight 4½ pounds.

This magnificent grouse, like the Black cock, inhabits Europe and North and Central Asia, being confined to the pine or evergreen forests of the north or the mountains of the more temperate countries as far south as northern Greece and Spain. Its food consists of tender shoots of the fir, buds of other trees, berries and seeds. It has recently been introduced and is apparently established in the Algonquin Park of Canada, and in 1905 and 1906 was liberated in Mr Litchfield's Adirondack preserve, where it ought to thrive.

Family PHASIANIDAE

As defined by Ogilvie Grant and as used by Sharpe in his Hand-List of Birds, this family includes the true partridges and quails as well as the pheasants and their immediate allies, not even subfamilies Perdicinae and Phasianinae being recognized. The family characters as distinguished from other gallinaceous birds are: tarsi and toes bare, claws well developed for scratching, nasal fossae uncovered, plumage dry and hard. In this family are found many of the best known and most valuable of birds, including the barnyard fowl, which, in its multiplicity of forms, has descended

from some of the four or five species of the genus Gallus still found in southeastern Asia. Many species of the most resplendent plumage and wonderful adaptations for sexual rivalry are found among the pheasants, such as the Peacock, Argus pheasant and Golden pheasant; but the partridges and quails, which are not given to polygamy, do not exhibit the spurs, wattles, plumes and brilliant colors possessed by the pheasants. Various members of this family have been introduced in America, but thus far only the Ring-neck, English and Japanese pheasants seem to be well established. The common European Partridge, Perdix cinerea, was liberated in several localities in New York State during the spring of 1909, under the name of Hungarian partridge, and may become acclimated in a few years.

Phasianus colchicus Linnaeus

English Pheasant

phasiā'nus, Gr. φασιανός, Lat. *phasianus*, the bird of the river Phasis; *col'chicus*, Lat. of *colchis*, the land of the Golden Fleece, from which the ancient Greeks are said to have brought this bird

Description. *Male:* Tail very long, cuneate, tapering; head with ear tufts and finely mottled sides; head and neck peacock blue, glossed with metallic reflections of green, bronze and purple; sides of head bare, scarlet; back orange-brown, variegated with dark green, buff and black; rump and upper tail coverts rufous, with black and reddish variegations; tail olive-brown, edged with purplish rufous, and barred with black; breast glossy, coppery chestnut, edged with purplish; no rings about the neck. Length 36 inches or less according to the development of the tail; tail up to 21 inches; extent about 32 inches; weight about 3 pounds. *Female:* Much smaller; length about 24 inches; tail 12 inches; weight 2 pounds; colors plain blended light brown and dusky.

This famous bird is a native of Asia Minor, Transcaucasia, Turkey and southeastern Russia as far north as the Volga. The ancient Greeks and Romans cultivated it, the latter no doubt introducing it into Britain, as it was well established in England and held in high esteem at the time of the Norman Conquest. Now the English breed is so mixed with the Chinese ring-necked pheasant and the Green pheasant which have been introduced into Great Britain in modern times, that pure blooded colchicus is difficult to procure except by importation from the Orient. It has been liberated in various portions of New York State, especially on Long Island and in the Lower Hudson valley, where it survives and breeds in a wild state, but probably will never thrive except under special protection.

Phasianus torquatus Gmelin

Ring-necked Pheasant

torquā'tus, Lat., ringed

Distinctive marks: Similar in general color to the English pheasant, but male with a conspicuous white ring about the neck; top of head more greenish bronze, and a whitish line on sides of crown; the sides golden buff, spotted with black; the upper wing coverts pale grayish blue; the sides of the rump grayish blue; belly greenish black. Slightly smaller than the English pheasant. Length 34 inches when the tail is full grown; extent 32; weight 2¾ pounds or more.

This bird, often incorrectly called the Mongolian pheasant, has become naturalized on Long Island, in the Hudson valley, the Genesee valley, and the lowlands south of Lake Ontario and about the Central Lakes. The State Forest, Fish and Game Commission has distributed birds of this species in many other parts of the State, but correspondence with the persons who received and liberated the birds indicates that pheasants have failed to become established except in the districts mentioned above. There is no question but that the pheasant will thrive in the warmer parts of New York, where the snows are not so severe as to cover its winter food supply of rose hips, wild grapes, thorn apples, weed seeds, waste grain, etc., provided it has reasonable protection and encouragement. It does some harm, however, to newly planted corn by following the rows and digging up the seed with its

powerful beak, and to standing grain, grapes etc., which are near its favorite haunts. It does much good, on the other hand, by destroying large quantities of grasshoppers, June beetles, caterpillars, and weed seeds, and needs little recommendation as a game bird in districts where the grouse and Bobwhite have disappeared.

Family **MELEAGRIDAE**

Turkeys

Turkeys have the head and upper neck naked, except a few stiff bristles, and wrinkled and wattled, with an erectile process growing on the forehead. The tarsi are naked, scutellate, and spurred in the male. Tail broad, rounded, of 14 to 18 truncated feathers.

Turkeys are an American family, the brilliant Ocellated turkey being a native of Yucatan, and the more familiar Wild turkey in its various forms, or subspecies, ranging through Mexico and the eastern United States. The Mexican form was the original of the domestic race which was established in Europe as early as 1530, and has become one of the most important birds of the world from an economic standpoint. The scientific name of the family is a misnomer, being the original name of the Guinea hen, and if the popular impression of the origin of the common name is correct, this is a misnomer also, but it is probable, as has been suggested, that the common name has reference to the call note of the bird which resembles the syllables *turk, turk, turk*. The Wild turkey is our noblest game bird, but is difficult to hunt successfully in sportsmanlike manner, and has long since disappeared from the more settled portions of the country.

Meleagris gallopavo silvestris (Vieillot)

Wild Turkey

Meleagris silvestris Vieillot. Nouv. Dict. d'Hist. Nat. 1817. 9: 447
Meleagris gallopavo DeKay. Zool. N. Y. 1844. pt 2, p. 199, fig. 172
A. O. U. Check List. Ed. 2. 1895. No. 310

meleā'gris, Gr. μελεαγρίς, Lat. *meleagris*, the guinea fowl; *gallopā'vo*, Lat. *gallus*, cock, and *pavo*, peafowl; *silvĕ'stris*, of the woodland

Distinctive marks. The common Wild turkey resembles the well known "Bronzed turkey" of the domestic race, but the erectile process on the forehead is less developed; *tip of the tail deep rusty* or chestnut, and the *tail coverts tipped with deep, rich chestnut.*

Length: male 48–50 inches; female 36; weight: male 16–30, or even 40–45 pounds; female 12 pounds.

Wild turkeys formerly inhabited eastern North America from Maine, Ontario, and Dakota to the gulf coast, but have long since disappeared from New England and New York. A few remained in Clinton, Fulton and Keating counties, Pennsylvania, until the close of the 19th century. These are the nearest native wild turkeys we have at present. In 1844, according to DeKay, they still were found in Sullivan, Rockland, Orange, Allegany and Cattaraugus counties of New York State, but must have been destroyed soon thereafter as I can find no subsequent records for the State. In colonial times they were common in New York. DeVries, in the journal of his voyages to New Netherlands, frequently speaks of them, and mentions shooting one near New Amsterdam which weighed 30 pounds. In 1641, at Fort Orange (Albany), there were "so many turkeys that they came to the houses and hogpens to feed" [Rev. J. Megapolensis, Munsell, Annals of Albany, 9: 133; *also* N. Y. Hist. Soc. Col. Ser. 2, 3, 150].

Order COLUMBAE

Pigeons

Head small, no frontal antiae, but the frontal feathers forming an abruptly convex outline at base of bill; neck short; bill horny at tip, compressed with a tumid swelling near the base about the nostril; wings pointed, flat, powerful, with rapid, whistling flight; legs short, the tarsus scutellate or feathered on point; no plumes; feathers loosely inserted; body plump, full breasted; front toes cleft, rear toe insistent, hence better perchers than Gallinae and more arboreal in habits; plumage without aftershafts, oil gland bare or wanting; gall bladder usually wanting; coeca small or wanting; two carotids; crop large, secreting a milky fluid to aid in nurturing the young; gizzard muscular; palate schizognathous; nasals schizorhinal; basipterygoids present; sternum doubly notched, or notched and windowed on each side; humerus with strong pectoral ridge; femorocaudal and its accessory, semitendinosus and its accessory, and normally the ambiens, all present. Pigeons walk with a peculiar motion of the head and neck in unison with their footsteps; their notes are a plaintive cooing; they are famously monogamous, the male sharing the care of the young. The nest is a wide, flat structure, the eggs two, white and nearly elliptical in shape. The young are altricial and ptilopaedic.

Family **COLUMBIDAE**

These are the true pigeons, the Passenger pigeon of America belonging to the subfamily Ectopistinae. The Ground doves and their allies according to Sharpe and other British authorities, should be placed in a separate family, the Peristeridae, distinguished largely by the bare tarsus, longer than the lateral toes. In New York the latter are represented by the Mourning dove and the little Ground dove.

Ectopistes migratorius (Linnaeus)

Passenger Pigeon

Plate 42

Columba migratoria Linnaeus. Syst. Nat. Ed. 12. 1766. 1: 285
Ectopistes migratorius DeKay. Zool. N. Y. 1844. pt 2, p. 196, fig. 167
A. O. U. Check List. Ed. 2. 1895. No. 315

ectopistes, Gr. ἐκτοπιστής, wanderer; *migratō'rius*, Lat., migratory

Description. Tail long, wedge-shaped, of twelve tapering feathers; wings sharp pointed, the first primary longest; head small; bill short; tarsi feathered part way in front, shorter than middle toe and claw, outer toe longer than inner. *Male: Upper parts slaty blue, including the whole head*, slightly shaded with olive-brown on wings and center of back; scapulars and wings with a few black spots; back and sides of neck iridescent with gold and purplish red; wing feathers and central pair of tail feathers blackish, the former with rusty white edgings; sides and flanks bluish; *foreneck and under parts "deep vinaceous rufous"* or light purplish chestnut, becoming whitish on the crissum and under tail coverts; tail feathers, except the central pair, bluish at the base fading to whitish at the tips, with black and *chestnut spots* near their bases; bill black; feet lake-red; bare skin about the eyes orange-red. *Female:* Under parts much *duller*, more olive-brownish above and *grayish below*, fading to whitish behind. *Young:* Duller still, the feathers of upper parts with whitish edgings and the wing feathers with rufous edgings.

Length 15–17.25 inches; extent 23–25.5; wing 8–8.5; tail 8–8.75; tarsus 1; middle toe and claw 1.25–1.35; bill .7–.75; weight 12 ounces.

The history of the wild pigeon in New York State, as told by early writers, or as handed down by pioneer settlers and remembered by persons now living, would fill a volume. The first explorers in New Netherlands and in the lake country all speak of the wild pigeon as among the most interesting and important of the native beasts and fowls. Wassenaers, about 1625, states that they were so numerous at New Amsterdam, "that they shut out the sunshine," [Documentary History of New York, 4: 29].

DeVries found them very numerous at Fort Orange, Albany, in 1639 [New York Hist. Soc. Col., Ser. 2, 3, 90]. Father Reffeix speaks of them as nesting abundantly near Cayuga, in 1670 and 1671, where as many as seven or eight hundred were taken in one haul of the net at the "salt-licks" where they came to drink [Jesuit Relation, 1671–72, 1675]. Near the head waters of the Susquehanna in 1753, Rev. G. Hawley found them breeding in "numbers almost infinite, in an extensive valley 6 or 8 miles in length, every tree having a number of nests and some not less than 15 or 20. As soon as the young are able to fly they are seen no more" [Documentary History of New York, 4: 632]. Near Albany, on March 25, 1830, thousands of pigeons which had begun their spring migration were overwhelmed by a severe snowstorm [Munsell, Annals of Albany, 9: 206]. In 1835, there was a great roost near Norwich, Chenango county, [Whitfield, Auk, 7: 224] and in 1863, near Fort Edward, Washington county. In 1867 there was a large nesting in Clinton county between Altona and Chateaugay [Rintoul, Canadian Sportsman and Naturalist. 1883. 3: 242]. About 1852, occurred the last nesting at Ashford, Cattaraugus county and practically all the squabs raised, together with the greater portion of the old birds, were captured. Between April 1 and June 15, 1854, millions flew regularly across Wayne county, N. Y., to feed at the Salt springs near Montezuma [Mershon, Passenger Pigeon. 1907. p. 122].

The last great pigeon nesting on New York soil evidently occurred in 1868, when millions of birds occupied the timber along Bell's run, near Ceres, Allegany county, on the Pennsylvania line. This nesting-tract was about 14 miles in length. Mr Fred R. Eaton of Olean, who visited the site during its occupation, has furnished the following particulars: The birds began laying in April and the hight of the nesting season was reached about the 10th of May, when hundreds of thousands of nests occupied the hemlock, pine and hardwood trees extending several miles into Pennsylvania. A large hemlock would frequently contain 30 or 40 nests with eggs or young. Both male and female birds took part in incubation and in feeding the squabs, one or the other continually covering the nest. The cock birds left the woods in a great flight early in the morning, scattering northward for many miles to feed on beech nuts, all kinds of grain, seeds and tender

shoots. About 11 o'clock in the forenoon all the hens left their nests to feed, and about 3 o'clock in the afternoon another flight, consisting entirely of red-breasted cocks, occurred. Just before the laying, the birds fed largely along the banks of streams and on the river flats, searching eagerly for earthworms and other "green food," when many were taken by netters and shipped from Olean to New York city by the carload. Great numbers of wagonloads were frequently seen coming into Olean. The whole tribe of Indians from the Cattaraugus Reservation moved to the nesting ground and remained for two weeks to capture pigeons. Professional netters who followed the pigeon nestings also captured them by tens of thousands. Their method of procedure was to construct a bow house near some favorable spot in the valley and set a large net with spring poles so as to cover a wide spot or "bed" on which the bait was scattered, then stool pigeons with their eyes sewed together were tied in such a position that they would keep up a fluttering, or could be made to flutter by the pulling of a string which worked the stool. Then flyers were tethered and when a flock appeared they were cast up and drawn back again by the strings to attract the approaching flocks to the net. In this manner many barrelfuls were captured in a short time. They also invaded the roosts and knocked the squabs off the nests, felling trees so as to shake down hundreds together. In preparing them for shipment their crops were torn out to prevent the breast meat from souring, they were then packed in barrels and hurried to the city. Pigeons continued to nest in this general locality until 1872, but no nesting of any considerable size occurred subsequent to 1875 when they bred in McKean county, Pa.

In 1875 there was an immense roost at Coopers, Steuben county and on May 5th the birds seemed about to nest [*Forest and Stream*, 4:204], but I have been unable to find evidence that a nesting actually occurred there at that time; although the time of year would indicate its probability. Dr C. Hart Merriam writing in 1881, in regard to the wild pigeon in the Adirondack region, says:

It breeds plentifully some years and others is not found at all. Early in June 1878 Dr C. L. Bagg and I found several of their nests in the vicinity of Moose river and about Fourth lake of Fulton chain, in Herkimer county. In one was a young bird almost ready to fly,

while the others contained eggs—and only one each. The crop of the young bird was full of beech nuts, some of which had the shells on. The hight at which the nests were placed varied from 7 to 30 feet. They were all much more substantial than the published accounts had led me to believe. In fact they were not frail structures at all, but were so compactly built of twigs, that one could by no means see daylight through them.

Wild pigeons evidently nested somewhere in western New York, or more likely in the forests of Pennsylvania, during the 80's, or later, as young birds were captured by the author at Springville, in 1882, in 1889 by Mr Kibbe at Mayville, and in the same year by Mr Bacon at Erie, Pa. This is the last definite evidence I have of their having bred in our State or its immediate vicinity, and in the years 1878–82 their numbers had so noticeably decreased that their final extermination was apprehended. The records of the Pigeon's appearance during the closing years of its history may be of interest:

Cooper, Steuben co., N. Y. May 5, 1875. Immense roost. Forest and Stream, 4: 204
Rochester, N. Y. Spring of 1875. Immense flights. Forest and Stream, 6: 18
" April 10, 1876. Immense flights. Forest and Stream, 6: 171
Meacham Lake, N. Y. May 2, 1876. Fuller, Forest and Stream, 6: 301
Central N. Y. Arrives Mar. 3, 1877. c. breeds. Fowler, Forest and Stream, 7: 36
Ithaca, N. Y. Apr. 6, 1877. Becoming rare. C. J. Pennock
Buffalo, N. Y. Mar. 8, 1878. c. Forest and Stream, 10: 99
Elmira, N. Y. Mar. 7, 1878. Flock. Gleason, Forest and Stream, 10: 503
Herkimer co., N. Y. Mar.–Sept. 1878. ab. Egg taken. May 18. C. J. Pennock
Lewis co., N. Y. Mar.–Sept. 1878. Dr C. H. Merriam
Ithaca, N. Y. Apr. 2, 1878. 2 seen. C. J. Pennock
Eldred, N. Y. Mar. 14, 1879. Forest and Stream, 12: 216
Lewis co, N. Y. Apr. 20–Oct. 1879. Dr C. H. Merriam
" Apr. 20, 1880. Dr C. H. Merriam
Penn Yan, N. Y. June 1880. 50 seen. Verdi Burtch
Lewis co., N. Y. Aug. 31–Sept. 10, 1881. Dr C. H. Merriam
" Mar. 3–22, 1882. Dr C. H. Merriam
Springville, N. Y. Mar. 20–28, 1882. Several flocks of 30–100. E. H. Eaton
Troy (market), N. Y. Mar. 23, 1882. Several purchased by A. F. Park
Moose River, N. Y. May 2, 1882. Some shot. Dr C. H. Merriam
Springville, N. Y. July 21, 1882. Young bird shot. E. H. Eaton
Niagara co., N. Y. May 10, 1883. J. L. Davison
Lewis co., N. Y. Apr. 7–May 12, 1883. Dr C. H. Merriam
Lowville, N. Y. Apr. 12, 1884. 200 seen. James H. Miller

Canadice, N. Y. 1884. Small flock seen. D. Byron Waite
Long Island City. Mar. 29, 1885. 1 seen. W. F. Hendrickson
Locust Valley, L. I. Sept. 7, 1885. Quite plentiful. W. F. Hendrickson
Long Island City. Sept. 22, 1885. 2 shot. (Hendrickson). Dutcher, L. I. Notes
" Sept. 20, 1886. 1 shot. John Hendrickson
Sag Harbor, L. I. Oct. 22, 1886. 1 shot. (Byram). Dutcher, L. I. Notes
Peterboro, Madison co., N. Y. Sept. 1886. 2 seen. Gerrit S. Miller
Long Island City. Oct. 19, 1887. W. F. Hendrickson
Cold Spring Harbor, L. I. Sept. 1888. 3 flocks, one of 20, others smaller. Dutcher
Westchester co., N. Y. Oct. 11, 1888. Gerald H. Thayer
Mayville, N. Y. May 15, 1889. Small flock, ♂ taken. A. E. Kibbe
" May 30, 1889. Young taken. A. E. Kibbe
Erie, Pa. June 9, 1889. ♂ taken. (Bacon). Todd, Birds of Erie, 551
" July 18, 1889. Young taken " " "
Millers Place, L. I. Sept. 26, 1889. 4 seen. A. H. Helme
Rockaway, L. I. Oct. 13, 1889. 1 shot. (Brasher). Dutcher, L. I. Notes
Millers Place, L. I. Fall of 1890. 6 seen. A. H. Helme
Niagara, Ont. Sept. 1891. Young ♂ taken. Ottomar Reinecke
Ithaca, N. Y. Spring 1892. 1 shot. L. A. Fuertes
Chautauqua co., N. Y. Summer of 1892. Small flock. Mershon, Passenger Pigeon. 1907. p. 150
Oxford, Chenango co., N. Y. 1893. Pair seen. F. H. Williams
Washington co., N. Y. Sept. 1893. 3 seen. F. T. Pember
Monroe co., N. Y. Mar. 29, 1894. 1 shot. George F. Guelf
East Schodack, N. Y. 1895. Small flock. (Payne). Judd, Birds of Albany Co. 1907. p. 136
Monroe co., N. Y. Apr. 7, 1895. 1 seen. George F. Guelf
Clinton, Oneida co., N. Y. Sept. 1895. 1 shot. J. R. Benton
Lewis co., N. Y. May 22, 1896. Flock of 300 seen. Johnson, Auk, 14: 88
Angola, Erie co., N. Y. Spring 1896. E. R. Reynolds
Englewood, N. J. June 23, 1896. Young male taken. Chapman, Auk, 13: 341
Lowville, N. Y. Oct. 1896. 1 seen. James H. Miller
Toronto, Ont. Oct. 22, 1896. 11 seen. Fleming, Auk, 20: 66
Livonia, N. Y. 1896. Small flock seen. D. Byron Waite
Buffalo, N. Y. Apr. 14, 1897. 2 seen. James Savage
Esperance, Schoharie co., N. Y. 1897. Flock of seven seen. Dr D. Norwood
Sangerfield, Oneida co., N. Y. July 1897. Seen. W. B. Mann
Canandaigua, N. Y. Sept. 14, 1898. ♂ taken. Addison P. Wilbur
Big Sandy Creek, N. Y. Fall 1898. 7 seen. Dr M. L. Crockett
East Batavia, Genesee co., N. Y. Sept. 28, 1899. Flock of 20 seen. F. J. Sager
Toronto, Ont. May 16, 1900. Flock of 10 seen. (Spanner). Fleming, Auk, 20: 66
" July 6, 1900. 5 seen. (Samuel). Fleming, Auk, 20: 66
Penctanquishene, Ont. May 16, 18, 1902. 2 seen. (Young). Fleming, Auk, 20: 66
Canandaigua, N. Y. Sept. 12, 1902. 1 seen. E. H. Eaton

Port Ewen, N. Y. Spring of 1904. 70-80 seen. Mershon, Passenger Pigeon. 1907. p. 184
Sullivan co., N. Y. Fall 1904. Large flock seen. " " " " 183
West Point. 1905. 2 seen. " " " " 180
Catskill. Spring 1905. Flock seen. " " " " 183
Sullivan co. Fall 1905. Flock seen. " " " " 183
Prattsburg, N. Y. April 1906. Large flock seen (Burroughs). Mershon, Passenger Pigeon, 1907. p. 181
Kingston, N. Y. May 15, 1906. Flock mile long seen (Burroughs). Mershon, Passenger Pigeon. 1907. p. 181
Sullivan co., N. Y. May 23, 1907. Flock of 1000 seen. Burroughs, Outlook, July 13, 1907. p. 547
Rensselaerville, N. Y. Summer 1907. 1 seen. (Huyck). Judd, Birds of Albany Co. p. 136

It is possible that some of these records, when the birds were merely seen, are in error, but Mr Wilbur's specimen, which I saw killed, was unquestionably reared in the spring of 1898, as it was just assuming the adult plumage, and a few scattered birds of this species may still be in existence, but we very much fear that the Passenger pigeon is doomed to extermination.

Zenaidura macroura carolinensis (Linnaeus)

Mourning Dove

Plate 42

Columba carolinensis Linnaeus. Syst. Nat. Ed. 12. 1766. 1: 286
Ectopistes carolinensis DeKay. Zool. N. Y. 1844. pt 2, p. 197, fig. 166
Zenaidura macroura A. O. U. Check List. Ed. 2. 1895. No. 316

zenaidū'ra, from Zenaida, name of an allied dove, and Gr. οὐρά, tail

Description. *Tail long*, pointed, of 14 tapering feathers; wings pointed, the second primaries longest, the first and third almost equal to it; *tarsus naked*, scutellate in front, shorter than middle toe, but longer than lateral toes; outer toe shorter than inner; bill shorter than head, slender; bare space above the eye. In general form and color much like the Passenger pigeon, but in structure quite different. *Male:* Upper parts, including central tail feathers, bluish gray, shaded with olive-brown; head and neck overlaid with glaucous blue: sides of neck with shining iridescence; *a bluish black spot under the ear;* scapulars and wing coverts with a few black spots; tail feathers, except the middle ones, grayish blue for the basal portion, then banded with black and tipped with white; *forehead and under parts vinaceous*, becoming ocherous on the belly; bill black, angle of mouth carmine;

eyes brown; feet red. *Female:* A little smaller and considerably duller than the male. *Young:* Similar to female but grayer, and the black spots wanting.

Length 11–13 inches; extent 17–19; wing 5.7–6; tail 5.7–6.5; tarsus .8; middle toe and claw 1; bill .6; weight 5–6 ounces.

Field marks. This species has been mistaken for the Passenger pigeon on numberless occasions and it is well for the observer to note his bird carefully to avoid being in error. The Mourning dove is much smaller than the wild pigeon, but, when no standard of comparison is at hand, it often gives the impression of being a much larger bird than it is. Its breast is much less red than the pigeon's, it is not so blue on the back, and it has the black spot in the ear region which is lacking in the pigeon.

Photo by Guy A. Bailey
Mourning dove. Zenaidura carolinensis (Linnaeus)

Distribution. The Mourning dove is fairly well distributed in all parts of New York, excepting the northern portion and the Highlands which are above 1000 feet in elevation, where it is rather uncommon. It is occasionally found about the borders of the North Woods as at Lake George, Old Forge, and Ausable Forks, but it is more characteristic of the Carolinian, and the warmer portion of Transition zone, than of the cooler districts. It is common in the coastal district, lower Hudson valley, and the lowlands of western New York, arriving from the south early in March in southeastern New York, and from the 20th to the 30th of March in the western counties, and departs for the south late in October, or in November, but rarely remains throughout the winter months in the warmer portions of the State.

It frequently begins to breed as early as the 20th of April and two or possibly three broods are reared. The nest is placed in the thick branches of an evergreen tree, in the fork of an apple tree, in an old robin's nest, on the top of a stump, or rotten rail in an old fence, or any other convenient location, sometimes even on the ground at the edge of a gravel pit or embankment. It is composed of slender twigs and grass stalks, and lined with a few leaves, grasses or moss, but quite flat and meager. The eggs are two in number, nearly elliptical in shape, and pure white in color, averaging about 1.12 x .82 inches in size. All summer long the mournful cooing of this little pigeon can be heard in the orchards and shade trees, even in the villages and the outskirts of cities, where they are left unmolested.

Photo by Ralph S. Paddock

Mourning dove's nest and eggs

The Mourning dove is beneficial in its food habits, partaking only of waste grain, weed seeds and insects. I have taken several thousand seeds of the foxtail or pigeon grass from the crop of a single dove which was shot from a flock of about 30 that were coming from an oat field in Ontario county. By measurement it was evident that this company of doves had just picked up about two quarts of weed seeds for their afternoon meal. Consequently in the course of several weeks they would do the farmer an inestimable service. The flesh of the Mourning dove is well flavored, and they are killed by thousands for food in the southern states, and if they ever become too abundant in New York State, they may be treated as a game bird under proper restrictions, to replace in some degree the finer species which we have lost.

Columbigallina passerina terrestris (Chapman)

Ground Dove

Columbigallina passerina terrestris Chapman. Am. Mus. Nat. Hist. Bul. 1892. 4: 292

A. O. U. Check List. Ed. 2. 1895. No. 320

columbigallina, Lat. *columba*, pigeon or dove, and *gallina*, hen; *passerina*, sparrowlike; *terrestris*, terrestrial

Description. Very small. *Male:* Forehead and under parts mostly vinaceous, the chest feathers with blackish centers; crown and back of head bluish gray; back brownish gray; wing coverts with dark steel-blue spots; tail blackish toward the end and tipped with whitish; bill coral red at base, blackish toward the tip. *Female and young:* Much paler and duller.

Length 6–7 inches; wing 3.5; tail 2.7; bill .45.

This diminutive pigeon inhabits the Southern States from Texas to North Carolina, and is accidental in the North Atlantic States. It was added to the New York list by Dr George B. Grinnell who gives the following account of its capture:

Early one Saturday in October 1862, I set out with another small boy, Henry A. Clapp, on a shooting excursion, the expected game being robins and flickers, with the possibility of a wild pigeon. We had just entered a piece of woods just north of the present 158th street, between what were later to become 11th and 12th avenues, when a small flock of birds alighted in a tall tulip tree almost above our heads. I was carrying the gun at the moment and fired at one of the birds resting on a branch, and when it fell and I picked it up I saw that it was a very small "pigeon." Neither my companion nor myself had ever seen anything like it but we both had seen Passenger pigeons.

When we had crossed the dirt road which is now 158th street we had seen Mr John Woodhouse Audubon mending fence near the corner of 158th street and 12th avenue, and knowing that he knew all about birds we went down to him and asked him to tell us what this was. He was a near neighbor of our parents, and we knew him very well, for much of our time was spent playing with his sons in and about his house and stables. He told us that it was a Ground dove, and pointed out a number of its characters. He also said, as I recall it, that he had never before seen one in that neighborhood.

After this we kept on our way and presumably at the end of the day returned with whatever game we had killed and ate the Ground dove.

Possibly a dozen years later, between 1870 and 1874, I saw another specimen of this species in New York, while walking along the Aqueduct in the general neighborhood of 160th street and 9th avenue. The bird was sitting on a fence and I had a good opportunity to look at it. By this time I knew something about birds myself and recognized what it was. The day was Sunday and I had no gun and no means of securing the bird.

EXPLANATION OF PLATES

Plate I

HOLBOELL GREBE

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HORNED GREBE

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PIED-BILLED GREBE

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HOLBOELL GREBE
Colymbus holboelli (Reinhardt)
WINTER
SUMMER

PIED-BILLED GREBE SUMMER
Podilymbus podiceps (Linnaeus)

HORNED GREBE
Colymbus auritus Linnaeus
WINTER
SUMMER

All $\frac{2}{3}$ nat. size

Plate 2

RED-THROATED LOON
Page 103

BLACK-THROATED LOON
Page 102

COMMON LOON
Page 99

RED-THROATED LOON
Gavia lumme (Brünnich)
SUMMER WINTER

COMMON LOON
Gavia immer (Brünnich)
SUMMER WINTER

BLACK-THROATED LOON
Gavia arctica (Linnaeus)
SUMMER

All $\frac{1}{6}$ nat. size

Plate 3

BLACK GUILLEMOT
Page 106

BRÜNNICH MURRE
Page 107

RAZOR-BILLED AUK
Page 110

PUFFIN
Page 105

DOVEKIE
Page 111

BLACK GUILLEMOT
Cepphus grylle (Linnaeus)
WINTER SUMMER

BRÜNNICH MURRE
Uria lomvia (Linnaeus)
SUMMER WINTER
EGG

RAZOR-BILLED AUK
Alca torda Linnaeus
SUMMER

PUFFIN
Fratercula arctica (Linnaeus)
SUMMER

All $\frac{1}{4}$ nat. size

DOVEKIE
Alle alle (Linnaeus)
SUMMER WINTER

Plate 4

POMARINE JAEGER
Page 114

LONG-TAILED JAEGER
Page 117

PARASITIC JAEGER
Page 116

SKUA
Page 113

POMARINE JAEGER *Stercorarius pomarinus* (Temminck)
LONG-TAILED JAEGER *Stercorarius longicaudus* Vieillot
ADULT
IMMATURE *S. parasiticus*

PARASITIC JAEGER *Stercorarius parasiticus* (Linnaeus)
DARK PHASE
INTERMEDIATE
LIGHT PHASE
SKUA *Megalestris skua* (Brünnich)

All $\frac{1}{8}$ nat. size

Plate 5

RING-BILLED GULL

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HERRING GULL

Page 127

GREAT BLACK-BACKED GULL

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GLAUCOUS GULL

Page 122

RING-BILLED GULL
Larus delawarensis Ord
ADULT IN SUMMER IMMATURE

GREAT BLACK-BACKED GULL
Larus marinus Linnaeus
IMMATURE ADULT IN SUMMER

HERRING GULL
Larus argentatus Brünnich
IMMATURE ADULT IN SUMMER

GLAUCOUS GULL
Larus glaucus Brünnich
END OF SECOND YEAR ADULT IN SUMMER
IMMATURE

All $\frac{1}{7}$ nat. size

Plate 6

SABINE GULL
Page 136

BONAPARTE GULL
Page 134

LAUGHING GULL
Page 132

IVORY GULL
Page 120

KITTIWAKE
Page 121

SABINE GULL ADULT IN SUMMER
Xema sabini (Sabine)

LAUGHING GULL ADULT IN SUMMER
Larus atricilla Linnaeus

KITTIWAKE
Rissa tridactyla (Linnaeus)
ADULT IN SUMMER
IMMATURE

IVORY GULL
Pagophila alba Gunnerus
IMMATURE
ADULT IN SUMMER

BONAPARTE GULL
Larus philadelphia (Ord)
ADULT IN SUMMER
IMMATURE

All $\frac{1}{8}$ nat. size

Plate 7

ARCTIC TERN
Page 146

LEAST TERN
Page 148

FORSTER TERN
Page 142

COMMON TERN
Page 143

GULL-BILLED TERN
Page 137

SOOTY TERN
Page 149

BLACK SKIMMER
Page 152

ROSEATE TERN
Page 147

ARCTIC TERN ADULT IN SUMMER
Sterna paradisaea Brünnich

GULL-BILLED TERN ADULT IN SUMMER
Gelochelidon nilotica (Hasselquist)

LEAST TERN
Sterna antillarum (Lesson)
IMMATURE ADULT IN SUMMER

SOOTY TERN ADULT IN SUMMER
Sterna fuscata Linnaeus

BLACK SKIMMER
Rhynchops nigra Linnaeus

ROSEATE TERN ADULT IN SUMMER
Sterna dougalli Montagu

FORSTER TERN
Sterna forsteri Nuttall
ADULT IN SUMMER IMMATURE

COMMON TERN
Sterna hirundo Linnaeus
ADULT IN SUMMER IMMATURE

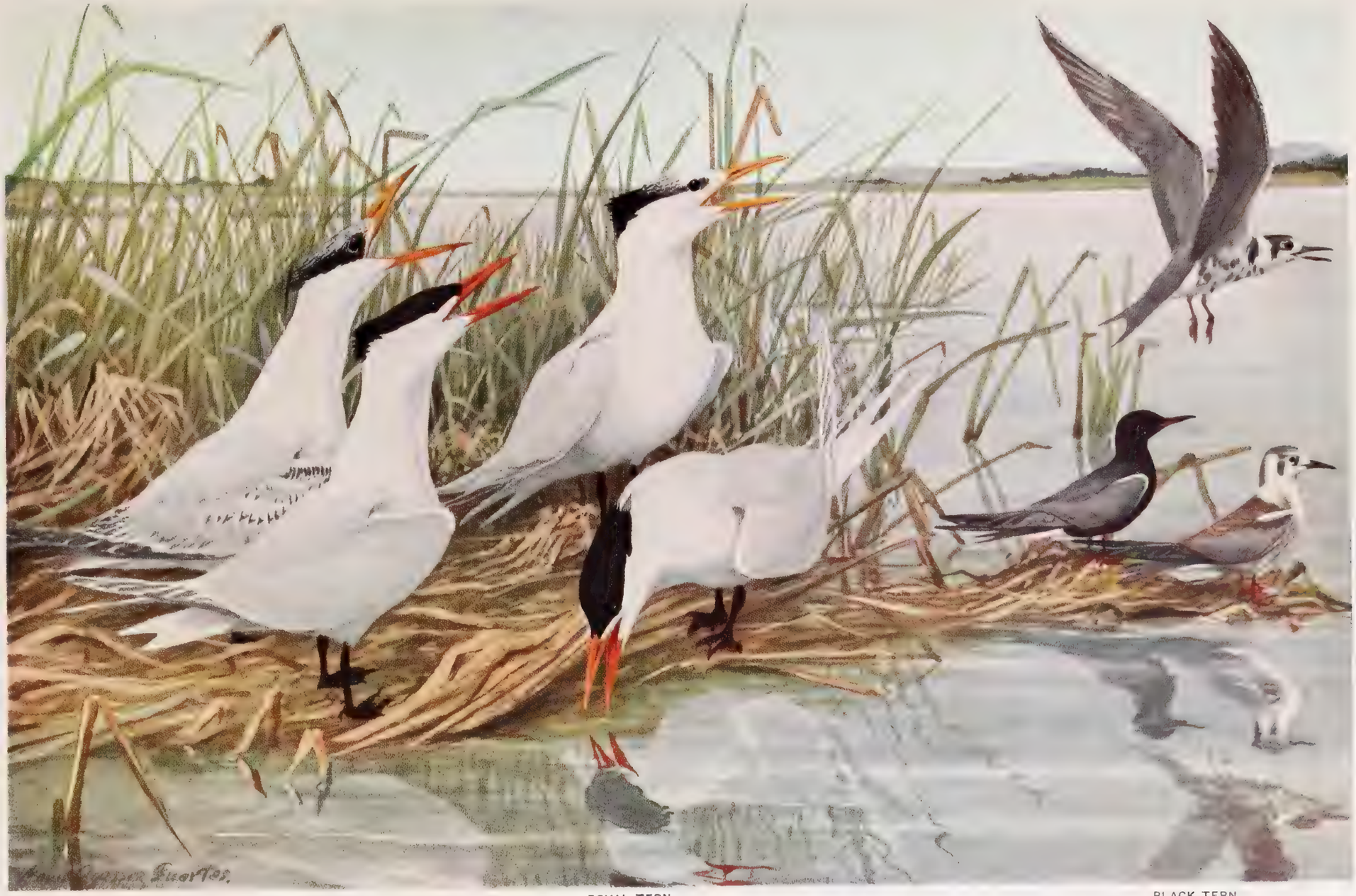
All $\frac{1}{6}$ nat. size

Plate 8

CASPIAN TERN
Page 138

ROYAL TERN
Page 139

BLACK TERN
Page 149



CASPIAN TERN
Sterna caspia Pallas
IMMATURE ADULT IN SPRING

ROYAL TERN
Sterna maxima Boddaert
ADULT IN WINTER ADULT IN SPRING

BLACK TERN
Hydrochelidon nigra surinamensis (Gmelin)
ADULT CHANGING TO WINTER PLUMAGE
ADULT IN SPRING IMMATURE

All $\frac{1}{6}$ nat. size

Plate 9

COMMON CORMORANT

Page 170

DOUBLE-CRESTED CORMORANT

Page 171

GANNET

Page 169

COMMON CORMORANT *Phalacrocorax carbo* (Linnaeus)

ADULT IN BREEDING PLUMAGE IMMATURE

DOUBLE-CRESTED CORMORANT *Phalacrocorax auritus* (Lesson)

ADULT IN BREEDING PLUMAGE IMMATURE

GANNET *Sula bassana* (Linnaeus)

ADULT IMMATURE

All $\frac{1}{6}$ nat. size

Plate 10

RED-BREASTED MERGANSER

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AMERICAN MERGANSER

Page 177

RUDDY DUCK

Page 225

BUFFLE-HEADED DUCK

Page 211

RED-BREASTED MERGANSER *Mergus serrator* (Linnaeus
FEMALE MALE

AMERICAN MERGANSER *Mergus americanus* (Cassin)
FEMALE MALE

All ¼ nat. size

RUDDY DUCK *Erismatura jamaicensis* (Gmelin)
FEMALE MALE

BUFFLE-HEADED DUCK *Charitonetta albeola* (Linnaeus)
MALE FEMALE

Plate 11

HOODED MERGANSER

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HOODED MERGANSER *Lophodytes cucullatus* (Linnaeus)

MALE FEMALE

$\frac{1}{4}$ nat. size

Plate 12

GADWALL
Page 187

MALLARD
Page 183

BLACK DUCK
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GADWALL
Chaulelasmus streperus (Linnaeus)
MALE FEMALE

MALLARD
Anas boschas Linnaeus
MALE FEMALE

BLACK DUCK
Anas obscura Gmelin
MALE

All $\frac{1}{6}$ nat. size

Plate 13

AMERICAN WIDGEON
Page 190

GREEN-WINGED TEAL
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EUROPEAN WIDGEON
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AMERICAN WIDGEON
Mareca americana (Gmelin)
MALE FEMALE

EUROPEAN WIDGEON
Mareca penelope (Linnaeus)
MALE FEMALE

GREEN-WINGED TEAL
Nettion carolinense (Gmelin)
MALE FEMALE

All $\frac{1}{6}$ nat. size

Plate 14

SHOVELER
Page 196

BLUE-WINGED TEAL
Page 194

WOOD DUCK
Page 199

SHOVELER
Spatula clypeata (Linnaeus)
FEMALE MALE

WOOD DUCK
Aix sponsa (Linnaeus)
FEMALE MALE

BLUE-WINGED TEAL
Querquedula discors (Linnaeus)
MALE FEMALE

All ¼ nat. size

Plate 15

PINTAIL

Page 197

PINTAIL *Dafila acuta* (Linnaeus)

MALE FEMALE

$\frac{1}{6}$ nat. size

Plate 16

REDHEAD
Page 202

CANVASBACK
Page 203

REDHEAD
Aythya americana (Eyton)
MALES

CANVASBACK
Aythya vallisneria (Wilson)
MALES

FEMALE

All $\frac{1}{4}$ nat. size

Plate 17

RING-NECKED DUCK
Page 207

LESSER SCAUP
Page 206

SCAUP
Page 205

RING-NECKED DUCK
Aythya collaris Donovan
MALE FEMALE

LESSER SCAUP
Aythya affinis (Eyton)
MALE FEMALE

SCAUP
Aythya marila (Linnaeus)
MALE FEMALE

All $\frac{1}{4}$ nat. size

Plate 18

AMERICAN GOLDEN-EYE

Page 208

AMERICAN GOLDEN-EYE. *Clangula clangula americana* (Bonaparte)

MALE FEMALE

$\frac{1}{3}$ nat. size

Plate 19

KING EIDER

Page 220

AMERICAN EIDER

Page 218

HARLEQUIN DUCK

Page 214

KING EIDER *Somateria spectabilis* Linnaeus
FEMALE MALE
AMERICAN EIDER *Somateria dresseri* Sharpe
FEMALE MALE

HARLEQUIN DUCK *Histrionicus histrionicus* Linnaeus
MALE FEMALE

Plate 20

OLDSQUAW
Page 213

SURF SCOTER
Page 224

AMERICAN SCOTER
Page 221

WHITE-WINGED SCOTER
Page 222

OLDSQUAW
Harelda hyemalis (Linnaeus)
FEMALE, MALE } WINTER — SUMMER { FEMALE, MALE

SURF SCOTER
Oidemia perspicillata (Linnaeus)
FEMALE — MALE

AMERICAN SCOTER
Oidemia americana Swainson
MALE — FEMALE

WHITE-WINGED SCOTER
Oidemia deglandi Bonaparte
MALE — FEMALE

All $\frac{1}{6}$ nat. size

Plate 21

BLUE GOOSE
Page 228

SNOW GOOSE
Page 227

AMERICAN WHITE-FRONTED GOOSE
Page 229

BLUE GOOSE
Chen caerulescens (Linnaeus)
ADULT IMMATURE

SNOW GOOSE
Chen hyperborea nivalis (Forster)
IMMATURE ADULT

AMERICAN WHITE-FRONTED GOOSE
Anser albifrons gambeli (Hartlaub)
ADULT IMMATURE

All $\frac{1}{8}$ nat. size

Plate 22

WHISTLING SWAN
Page 236

CANADA GOOSE
Page 230

BRANT
Page 233

BLACK BRANT
Page 234

WHISTLING SWAN
Olor columbianus (Ord)

CANADA GOOSE
Branta canadensis (Linnaeus)

BRANT
Branta bernicla glaucogastra (Brehm)

BLACK BRANT
Branta nigricans (Lawrence)

All $\frac{1}{7}$ nat. size

Plate 23

GREEN HERON
Page 262

LEAST BITTERN
Page 250

AMERICAN BITTERN
Page 246

GREEN HERON *Butorides virescens* (Linnaeus)
IMMATURE ADULT
AMERICAN BITTERN *Botaurus lentiginosus* (Montagu)
All ¼ nat. size

LEAST BITTERN *Ixobrychus exilis* (Gmelin)
FEMALE MALE

Plate 24

AMERICAN EGRET

Page 256

SANDHILL CRANE

Page 269

BLACK-CROWNED NIGHT HERON

Page 264

GREAT BLUE HERON

Page 253

AMERICAN EGRET
Herodias egretta (Gmelin)
SANDHILL CRANE
Grus mexicana (Müller)

BLACK-CROWNED NIGHT HERON
Nycticorax nycticorax naevius (Boddaert)
ADULT IMMATURE
GREAT BLUE HERON
Ardea herodias Linnaeus
ADULT IN SUMMER IMMATURE

All ⅛ nat. size

Plate 25

VIRGINIA RAIL
Page 274

CLAPPER RAIL
Page 272

KING RAIL
Page 271

VIRGINIA RAIL
Rallus virginianus Linnaeus

DOWNY YOUNG — ADULT — IMMATURE

KING RAIL
Rallus elegans Audubon

CLAPPER RAIL
Rallus longirostris crepitans (Gmelin)

All ½ nat. size

Plate 26

YELLOW RAIL
Page 280

LITTLE BLACK RAIL
Page 281

CAROLINA RAIL OR SORA
Page 276

YELLOW RAIL
Coturnicops noveboracensis (Gmelin)
ADULT
DOWNY YOUNG of Little Black Rail

LITTLE BLACK RAIL
Creceiscus jamaicensis (Gmelin)
ADULT

CAROLINA RAIL OR SORA
Porzana carolina (Linnaeus)
ADULT
DOWNY YOUNG

All $\frac{3}{4}$ nat. size

Plate 27

PURPLE GALLINULE
Page 283

FLORIDA GALLINULE
Page 284

AMERICAN COOT
Page 286

PURPLE GALLINULE
Ionornis martinica (Linnaeus)

FLORIDA GALLINULE
Gallinula galeata (Lichtenstein)

AMERICAN COOT
[illegible]
ADULT

All ⅔ nat. size

Plate 28

RED PHALAROPE

Page 289

RED PHALAROPE *Phalaropus fulicarius* (Linnaeus)

FEMALE

MALE

AUTUMN AND WINTER PLUMAGE

All $\frac{3}{4}$ nat. size

Plate 29

NORTHERN PHALAROPE

Page 291

NORTHERN PHALAROPE *Lobipes lobatus* (Linnaeus)

AUTUMN AND WINTER PLUMAGE

FEMALE

MALE

All $\frac{3}{8}$ nat. size

Plate 30

WILSON PHALAROPE
Page 191

WILSON PHALAROPE *Steganopus tricolor* Vieillot

AUTUMN AND WINTER PLUMAGE — FEMALE — MALE

All $\frac{2}{3}$ nat. size

Plate 31

AMERICAN WOODCOCK

Page 297

AMERICAN WOODCOCK *Philohela minor* (Gmelin)

$\frac{7}{8}$ nat. size

Plate 32

WILSON SNIPE

Page 300

WILSON SNIPE *Gallinago delicata* (Ord)

$\frac{7}{8}$ nat. size

Plate 33

See plate 34

RUDDY TURNSTONE
Page 357

RED-BACKED SANDPIPER
Page 315

DOWITCHER
Page 303

SANDERLING
Page 319

STILT SANDPIPER
Page 306

KNOT
Page 307

TURNSTONE
Arenaria morinella (Linnaeus)
SANDERLING
Calidris alba (Pallas)

RED-BACKED SANDPIPER
Pelidna alpina sakhalina (Vieillot)
STILT SANDPIPER
Micropalma himantopus (Bonaparte)
BREEDING PLUMAGES
All ½ nat. size

DOWITCHER
Macrorhamphus griseus (Gmelin)
KNOT
Tringa canutus Linnaeus

Plate 34

See plate 33

PURPLE SANDPIPER
Page 308

SANDERLING
Page 319

DOWITCHER
Page 303

RED-BACKED SANDPIPER
Page 315

STILT SANDPIPER
Page 306

KNOT
Page 307

PURPLE SANDPIPER
Arquatella maritima (Brünnich)

SANDERLING
Calidris alba (Pallas)

RED-BACKED SANDPIPER
Pelidna alpina sakhalina (Vieillot)

STILT SANDPIPER
Micropalama himantopus (Bonaparte)

AUTUMN AND WINTER PLUMAGES

All $\frac{1}{2}$ nat. size

KNOT
Tringa canutus Linnaeus

DOWITCHER
Macrorhamphus griseus (Gmelin)

Plate 35

PECTORAL SANDPIPER

Page 309

LEAST SANDPIPER

Page 313

WHITE-RUMPED SANDPIPER

Page 311

SEMIPALMATED SANDPIPER

Page 317

BAIRD SANDPIPER

Page 312

PECTORAL SANDPIPER
Actodromas maculata (Vieillot)

WHITE-RUMPED SANDPIPER
Actodromas fuscicollis (Vieillot)
SPRING AUTUMN

BAIRD SANDPIPER
Actodromas bairdi Coues

LEAST SANDPIPER
Actodromas minutilla (Vieillot)
AUTUMN SPRING

SEMIPALMATED SANDPIPER
Ereunetes pusillus (Linnaeus)
SPRING AUTUMN

All ½ nat. size

Plate 36

SOLITARY SANDPIPER

Page 326

SPOTTED SANDPIPER

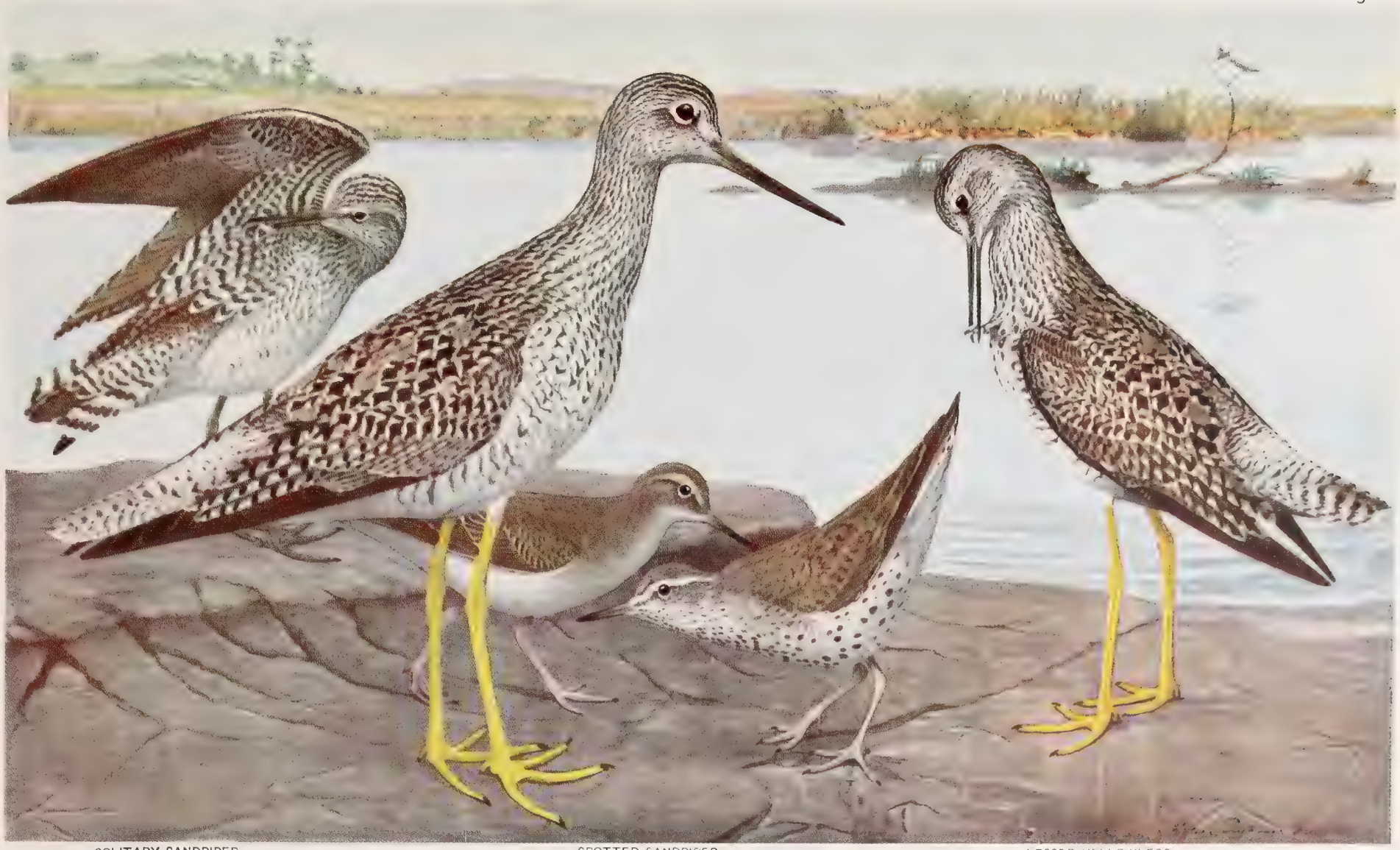
Page 335

GREATER YELLOWLEGS

Page 323

LESSER YELLOWLEGS

Page 325



SOLITARY SANDPIPER
Helodromas solitarius (Wilson)

GREATER YELLOWLEGS
Totanus melanoleucus (Gmelin)

IMMATURE

SPOTTED SANDPIPER
Actitis macularia (Linnaeus)

ADULT

SUMMER PLUMAGES
All ½ nat. size

LESSER YELLOWLEGS
Totanus flavipes (Gmelin)

Plate 37

LONG-BILLED CURLEW
Page 338

ESKIMO CURLEW
Page 341

HUDSONIAN GODWIT
Page 321

MARBLED GODWIT
Page 320

HUDSONIAN CURLEW
Page 339

LONG-BILLED CURLEW
Numenius longirostris Wilson
HUDSONIAN CURLEW
Numenius hudsonicus Latham

ESKIMO CURLEW
Numenius borealis (Forster)

All $\frac{2}{7}$ nat. size

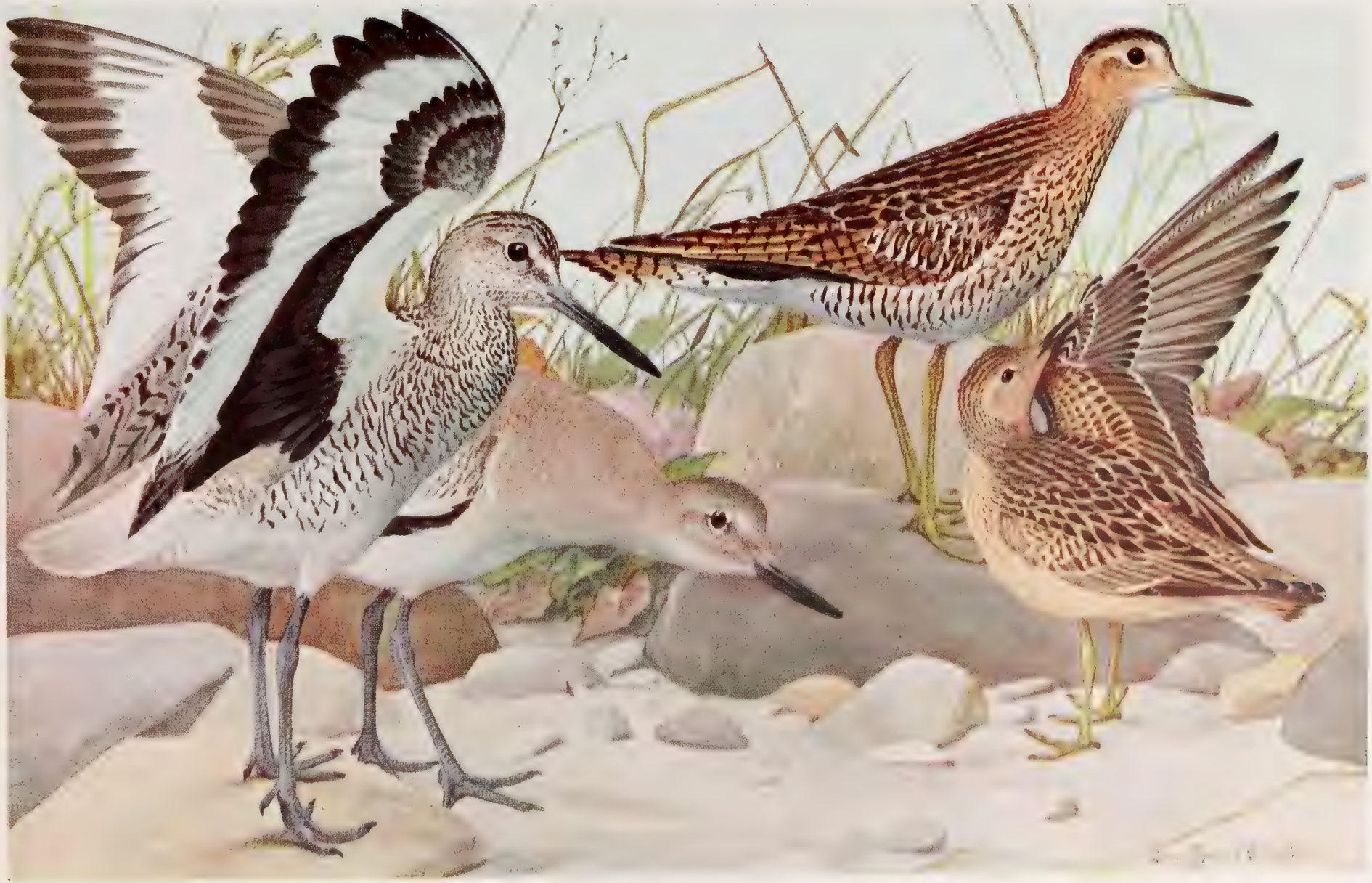
MARBLED GODWIT
Limosa fedoa (Linnaeus)
HUDSONIAN GODWIT SPRING
Limosa haemastica (Linnaeus)

Plate 38

WILLET
Page 328

BUFF-BREASTED SANDPIPER
Page 334

BARTRAMIAN SANDPIPER OR UPLAND PLOVER
Page 331



WILLET
Catoptrophorus semipalmata (Gmelin)
SPRING AUTUMN

BARTRAMIAN SANDPIPER OR UPLAND PLOVER
Bartramia longicauda (Bechstein)

BUFF-BREASTED SANDPIPER
Tryngites subruficollis (Vieillot)

All $\frac{2}{5}$ nat. size

Plate 39

AMERICAN GOLDEN PLOVER

Page 346

KILLDEER PLOVER

Page 348

BLACK-BELLIED PLOVER

Page 345

SEMIPALMATED PLOVER

Page 352

AMERICAN GOLDEN PLOVER
Charadrius dominicus Müller
SPRING AUTUMN

BLACK-BELLIED PLOVER
Squatarola squatarola (Linnaeus)
SPRING AUTUMN

KILLDEER PLOVER
Oxyechus vociferus (Linnaeus)

SEMIPALMATED PLOVER
Aegialitis semipalmata Bonaparte

All $\frac{2}{5}$ nat. size

Plate 40

BOBWHITE OR QUAIL

Page 361

BOBWHITE OR QUAIL *Colinus virginianus virginianus* (Linnaeus)
MALE AND FEMALE
½ nat. size

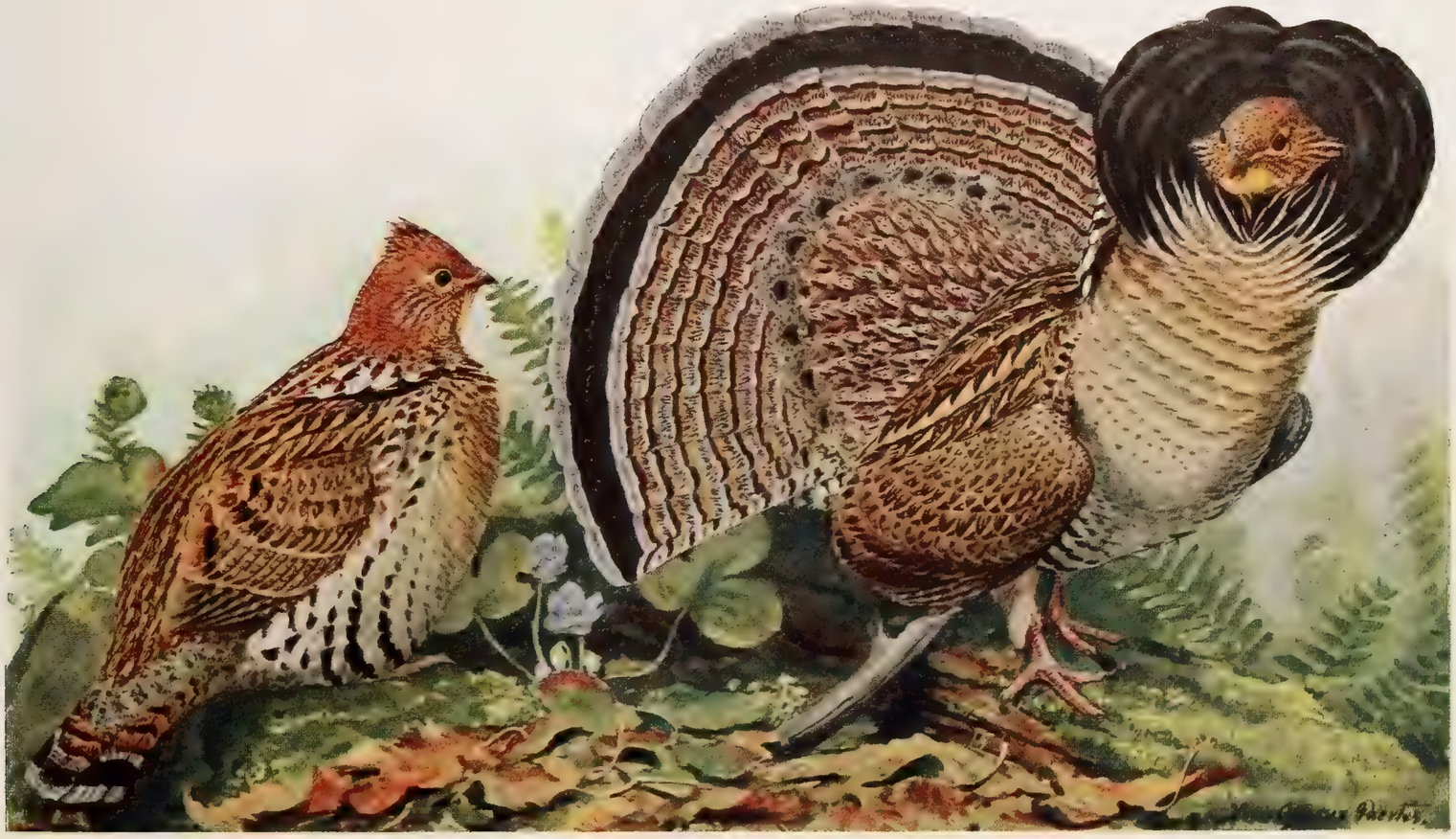
Plate 41

CANADA OR SPRUCE GROUSE

Page 365

RUFFED GROUSE

Page 366



CANADA OR SPRUCE GROUSE *Canachites canadensis canace* (Linnaeus)

MALE AND FEMALE

$\frac{2}{7}$ nat. size

RUFFED GROUSE *Bonasa umbellus umbellus* (Linnaeus)

FEMALE MALE, STRUTTING

$\frac{1}{4}$ nat. size

Plate 42

PASSENGER PIGEON
Page 381

MOURNING DOVE
Page 386

PASSENGER PIGEON *Ectopistes migratorius* (Linnaeus)

YOUNG MALE FEMALE

$\frac{1}{3}$ nat. size

MOURNING DOVE *Zenaidura macroura carolinensis* (Linnaeus)

FEMALE YOUNG MALE

$\frac{1}{3}$ nat. size

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